



Ahmedabad  
University

# COURSE CATALOGUE

2025-2026

# Ahmedabad University Course Catalogue

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## **Ahmedabad University**

Ahmedabad University is a private, non-profit university dedicated to rigorous academic pursuit through interdisciplinary learning with a focus on building enquiry as a value. It was established in 2009 by the Ahmedabad Education Society. We provide a liberal education, preparing students to reflect deeply and creatively across fields to become independent thinkers and compassionate leaders. This unique learning process is mediated by projects, fieldwork and a belief that a strong theoretical grounding leads to a robust practice. As a research university, we are building an environment where students and professors explore by reflecting, challenging views and assumptions of each other through data and rigorous discussions, and collaborating to develop insights.

## **Academic Calendar 2025-26 for Returning Students of all Programmes and Incoming Students of Graduate Programmes**

### **Monsoon Semester**

First Day of Classes	August 04, 2025
Mid-Semester Examination Period	September 20 - 28, 2025
Diwali Break	October 18 - October 22, 2025
Quiet Reading Period	November 24 - November 28, 2025
End Semester Examination Period	November 29 - December 07, 2025
Semester Break	December 08, 2025 - January 04, 2026

### **Independent Study Period**

December 08, 2025 - January 04, 2026

### **Winter Semester**

First Day of Classes	January 05, 2026
Mid Semester Examination Period	February 21 - March 01, 2026
Quiet Reading Period	April 20 - 25, 2026
End Semester Examination Period	April 26 - May 03, 2026

### **Summer Term**

First Day of Classes	May 11, 2026
Mid-Term Examination Period	Week 4, during class hours
End Term Examination Period	July 06 - July 10, 2026

### **Summer Break and Internship Period**

May 04 - July 26, 2026

## **Academic Calendar 2025-26 for Incoming Students of Undergraduate and Integrated Masters Programmes**

<b>Orientation</b>	July 30 - August 03, 2025
<b>Monsoon Semester</b>	
First Day of Classes	August 04, 2025
Mid-Semester Examination Period	October 04 - 05, 2025
Bi-Semester Courses Begin	October 06, 2025
Diwali Break	October 18 - 22, 2025
Mid-Bi-Semester / Monsoon End Semester Examination Period	November 29 - December 07, 2025
Semester Break	December 08, 2025 - January 04, 2026
<b>Independent Study Period</b>	December 08, 2025 - January 04, 2026
<b>Winter Semester</b>	
First Day of Classes	January 05, 2026
Quiet Reading Period for Bi-Semester Courses	February 18 - 20, 2026
Mid-Semester / End Bi-Semester Examination Period	February 21 - March 01, 2026
Quiet Reading Period	April 29 - 30, 2026
End Semester Examination Period	May 01 - 03, 2026
<b>Summer Term</b>	
First Day of Classes	May 11, 2026
Mid-Term Examination Period	Week 4, during class hours
End-Term Examination Period	July 06 - July 10, 2026
<b>Summer Break and Internship Period</b>	May 04 - July 26, 2026

## **Amrut Mody School of Management**

### *Undergraduate Programmes*

Ahmedabad University  
Amrut Mody School of Management, Heritage Building  
Navrangpura, Ahmedabad 380009  
Gujarat, India

#### **Programme Chair**

Bachelor of Business Administration (Honours)  
Professor Kunal Mankodi  
Email: [kunal.mankodi@ahduni.edu.in](mailto:kunal.mankodi@ahduni.edu.in)

Bachelor of Commerce (Honours)  
Professor Hetal Jhaveri  
Email: [hetal.jhaveri@ahduni.edu.in](mailto:hetal.jhaveri@ahduni.edu.in)

Integrated Master of Business Administration  
Professor Amrita Bihani  
Email: [amrita.bihani@ahduni.edu.in](mailto:amrita.bihani@ahduni.edu.in)

### *Graduate Programmes*

Master of Business Administration  
Ahmedabad University  
Amrut Mody School of Management, Heritage Building  
Navrangpura, Ahmedabad 380009  
Gujarat, India

#### **Programme Chair**

Professor Sudhir Pandey  
Email: [sudhir.pandey@ahduni.edu.in](mailto:sudhir.pandey@ahduni.edu.in)

Master of Science in Economics

#### **Programme Chair**

Abhinandan Sinha  
Email: [chair.maeconomics@ahduni.edu.in](mailto:chair.maeconomics@ahduni.edu.in)

Master of Management Studies - Heritage Management  
Ahmedabad University  
Asmita Bhavan, Central Campus  
Navrangpura, Ahmedabad 380009  
Gujarat, India

#### **Programme Chair**

Professor Aditya Kanth  
Email: [chair.mms@ahduni.edu.in](mailto:chair.mms@ahduni.edu.in)

## **School of Arts and Sciences**

Ahmedabad University  
School of Arts and Sciences Building, Central Campus  
Navrangpura, Ahmedabad 380009  
Gujarat, India

#### **Programme Chair**

Bachelor of Arts (Honours)  
Professor Leya Mathew  
Email: [programmechair-ba@ahduni.edu.in](mailto:programmechair-ba@ahduni.edu.in)

Bachelor of Science (Honours)  
Professor Aditya Vaishya  
Email: [programmechair-bs-ims@ahduni.edu.in](mailto:programmechair-bs-ims@ahduni.edu.in)

Integrated Master of Science in Life Sciences  
Professor Aditya Vaishya  
Email: [programmechair-bs-ims@ahduni.edu.in](mailto:programmechair-bs-ims@ahduni.edu.in)

## **School of Engineering and Applied Science**

Ahmedabad University  
GICT Building, Central Campus Navrangpura,  
Ahmedabad 380009 Gujarat, India

**Programme Chair**

Bachelor of Technology

Professor Sridhar Dalai

Email: [ug.coordinator.seas@ahduni.edu.in](mailto:ug.coordinator.seas@ahduni.edu.in)

Master of Technology in Computer

Science and Engineering

Professor Srikrishnan Divakaran

Email: [srikrishnan.divakaran@ahduni.edu.in](mailto:srikrishnan.divakaran@ahduni.edu.in)

**Bagchi School of Public Health**

Doctor of Philosophy in Epidemiology

**Programme Chair**

Professor Kaumudi Joshipura

Email: [dean.sph@ahduni.edu.in](mailto:dean.sph@ahduni.edu.in)

**Venture Studio**

Ahmedabad University

A G Campus

Navrangpura, Ahmedabad 380009

Gujarat, India

**University Office**

Ahmedabad University

Commerce Six Roads

Navrangpura, Ahmedabad 380009

Gujarat, India

## **Explanation of Course Codes**

The system of university course codes uses a combination of three letters and three digits for each course. Letters indicate the course area and the digits indicate the level of the course and the serial number of the course in that area.

For example, in course code COM101- Effective Reading and Comprehension Skills, COM refers to the Communication area and 101 indicates that it is an undergraduate level course and its serial number is 1. Similarly, the course with the course code CSC101 is a Computer Science course at the undergraduate level with serial number 1. The course numbering system is further explained below.

### **Undergraduate Courses:** 100-400 level courses

- 100—199      Entry level courses
- 200—299      Intermediate level courses
- 300—399      Advanced level courses with prerequisites
- 400—499      Specialisation, advanced or dissertation courses

### **Graduate Courses:** 500-800 level courses

- 500—599      Entry level Master's courses
- 600—699      Specialisation, advanced or dissertation Master's courses
- 700—799      Entry level Doctoral courses
- 800—899      Specialisation, advanced or dissertation Doctoral courses

### **Seminar Courses:** 900-999 level courses

*\* Entry level and Intermediate level courses may or may not have prerequisites.*

## **University Course Registration**

All students must register for courses online using the Ahmedabad University Resource Information System (AURIS) during the course registration period every semester. Credentials to log in to the system are communicated to all students on their University email addresses, at the time of admission. The course registration system allows students the flexibility to take courses of their choice across the University. However the final allotment of courses will be done based on the availability of courses, class size limits and fulfilment of prerequisites. Students can search for courses of their choice and choose the available time slots from the system. To maintain full time student status at the University, students need to register for at least 12 credits. The upper limit of number of courses may vary from programme to programme based on the curriculum structure.

The course registration process consists of four phases: Expression of Interest, Pre-Registration, Final Registration and Add/Drop Period.

### **Expression of Interest (EOI)**

In this first stage of the registration process, students are required to express their desire to opt for courses from among the pool of courses available to them. This is done specifically with three objectives: one, to let students know the courses that are likely to be offered during the upcoming semester; two, to ascertain how many students are desirous of various courses, which helps the Programme Offices in planning for courses for the upcoming semester; and three, to give students who participate in the EOI an opportunity to register for those courses ahead of the other students who do not participate in the EOI.

### **Pre-Registration**

Students need to pre-register every semester to indicate their interest in courses of their choice in the following semester. Generally, registration for the Monsoon Semester/Bi-Semester starts in the first week of June and for the Winter Semester starts in the second week of November of each academic year.

### **Final Registration**

Students must pay the fees with all dues before the final registration starts or by the due date mentioned by the University. Courses chosen during the pre-registration phase will be reserved till the fees payment due date. If fees are not paid by the due date, courses will be removed from a student's selection and the student will need to re-register for the courses. Students who have applied for financial aid will be communicated the financial aid decision separately before the course registration starts. Final registration for the Monsoon Semester/Bi-Semester starts in the last week of June, for the Winter Semester it starts in the first week of December, and for the Summer Term it starts in the last week of March of each academic year.

## **Add/Drop Period**

Students are encouraged to attend sessions in the courses of their interest during the first week of the semester even if they may not have registered for such a course. During this one week, they can register for such courses of their interest if there are seats. The Add/Drop period also gives flexibility to students to drop a course. Students can drop a course for a period of up to four weeks. Once the period is over students cannot drop any course they have registered for. However if a student wishes to do so due to exceptional circumstances, she may only do so with the approval of the Programme Chair, Associate Dean or Dean of the School to which she belongs. The request may be approved or rejected based on the circumstances and explanation given by the student.

The procedure for course registration is explained below.

- 1 Students need to log in to [www.auris.ahduni.edu.in](http://www.auris.ahduni.edu.in) with credentials given to them.
- 2 Students must then click on the course registration tab.
- 3 Course registration will not open unless the student has paid the fees and other dues. In case they have paid the fees and are unable to register, they need to contact their Programme Office. The Programme Office will verify the payment status and facilitate the registration.
- 4 Students can see the available courses from all Schools.
- 5 Students can search for any course at any School. Through the course search facility, a student can search for courses by course code, course name, professor name, keywords of the course description, etc.
- 6 Once the student finds the course of her choice, she can see the details of the course along with available time slots.
- 7 The student can add a course with a preferred time slot. The system will check the time clash with his/her previously added courses and if no clash is found the course will be added to her course selection panel. The system will also check the maximum and minimum credit range allowed to the student.
- 8 Students can choose three courses beyond their maximum credit load as preference.
- 9 Before final confirmation, the student can add/drop any courses to and from her course selection panel.
- 10 Student can repeat this process any number of times as long as the course registration system remains open.
- 11 After the course registration system is closed, the last course choice submission will be considered as the final selection of the student and courses will be allotted based on that selection.
- 12 Add/Drop Period: Each student will be given a choice to add/drop courses during the Add/Drop Period, in case they wish to make any changes in their registration.

***\* In case of any difficulty during or after the course registration period student can contact their respective Programme Offices.***

**Timetable (School-wise)**  
**Monsoon Semester 2025**

<b>Sr. No.</b>	<b>School</b>	<b>Course</b>	<b>Credits</b>	<b>Prerequisites</b>	<b>Section</b>	<b>Instructor</b>	<b>Time and Day</b>
1	AMSOM	COM101 Effective Reading and Comprehension Skills	3		1	Parijat Pandya	08:00 am - 09:30 am Wed, Fri
2	AMSOM	COM101 Effective Reading and Comprehension Skills	3		2	Preeti Maneck	08:00 am - 09:30 am Tue, Thu
3	AMSOM	COM101 Effective Reading and Comprehension Skills	3		3	Jalaj Singh	08:00 am - 09:30 am Mon, Fri
4	AMSOM	COM101 Effective Reading and Comprehension Skills	3		4	Jalaj Singh	04:00 pm - 05:30 pm Mon, Fri
5	AMSOM	COM101 Effective Reading and Comprehension Skills	3		5	Parijat Pandya	04:00 pm - 05:30 pm Tue, Thu
6	AMSOM	COM101 Effective Reading and Comprehension Skills	3		6	Gatha Joshipura	04:00 pm - 05:30 pm Mon, Fri
7	AMSOM	COM101 Effective Reading and Comprehension Skills	3		7	Jalaj Singh	04:00 pm - 05:30 pm Tue, Thu
8	AMSOM	COM101 Effective Reading and Comprehension Skills	3		8	Parijat Pandya	08:00 am - 09:30 am Tue, Thu
9	AMSOM	COM101 Effective Reading and Comprehension Skills	3		9	Parijat Pandya	04:00 pm - 05:30 pm Mon, Fri
10	AMSOM	COM101 Effective Reading and Comprehension Skills	3		10	Gatha Joshipura	05:30 pm - 07:00 pm Mon, Fri
11	AMSOM	COM101 Effective Reading and Comprehension Skills	3		11	Saujanya Shyam	08:00 am - 09:30 am Mon, Wed
12	AMSOM	COM101 Effective Reading and Comprehension Skills	3		12	Saujanya Shyam	08:00 am - 09:30 am Tue, Thu
13	AMSOM	COM101 Effective Reading and Comprehension Skills	3		13	Jaayini Shah	08:00 am - 09:30 am Tue, Thu
14	AMSOM	COM101 Effective Reading and Comprehension Skills	3		14	Jaayini Shah	08:00 am - 09:30 am Mon, Wed
15	AMSOM	COM101 Effective Reading and Comprehension Skills [Bi-Semester]	3		15	Jaayini Shah	04:00 pm - 05:30 pm Mon, Fri

16	AMSOM	COM101 Effective Reading and Comprehension Skills [Bi-Semester]	3		16	Saujanya Shyam	04:00 pm - 05:30 pm Mon, Fri
17	AMSOM	COM101 Effective Reading and Comprehension Skills [Bi-Semester]	3		17	Saujanya Shyam	04:00 pm - 05:30 pm Tue, Thu
18	AMSOM	COM101 Effective Reading and Comprehension Skills [Bi-Semester]	3		18	Jalaj Singh	09:30 am - 11:00 am Wed, Fri
19	AMSOM	COM102 Advanced Writing	3		1	Gatha Joshipura	04:00 pm - 05:30 pm Tue, Thu
20	AMSOM	COM102 Advanced Writing	3		2	Jalaj Singh	08:00 am - 09:30 am Tue, Thu
21	AMSOM	COM115 Gender Sensitization	3		1	Chirag Trivedi	04:00 pm - 05:30 pm Mon, Fri
22	AMSOM	COM202 City as Text	3		1	Sudhir Pandey	04:00 pm - 05:30 pm Mon, Fri
23	AMSOM	COM501 Managerial Communication	1.5	OR None	1	Tana Trivedi	09:30 am - 11:00 am Fri
24	AMSOM	COM501 Managerial Communication	1.5	OR None	2	Sudhir Pandey	11:00 am - 12:30 pm Mon
25	AMSOM	COM506 Culture and Communication	1.5		1	Chirag Trivedi	02:30 pm - 04:00 pm Tue
26	AMSOM	COM507 Communication Lab I	0.75		1	Sudhir Pandey	01:00 pm - 02:30 pm Mon
27	AMSOM	COM507 Communication Lab I	0.75		2	Sudhir Pandey	01:00 pm - 02:30 pm Fri
28	AMSOM	DES101 Fundamentals of Design	3		1	Umang Shah	07:00 pm - 08:30 pm Mon, Fri, 11:00 am - 12:30 pm Sat
29	AMSOM	DES102 Visual Communication and Graphic Design	3		1	Jalp Lakhia	08:00 am - 09:30 am Mon, Fri
30	AMSOM	DES103 Biomimicry With Playfulness	3		1	Ruchie Kothari	05:30 pm - 07:00 pm Tue, Thu
31	AMSOM	DES201 Strategic Branding and Packaging Design	3		1	Neha Singh	05:30 pm - 07:00 pm Tue, Thu, 07:00 pm - 08:30 pm Thu
32	AMSOM	DES202 Interaction Design and User Experience	3		1	Naisargi Shah	02:30 pm - 04:00 pm Tue, Thu
33	AMSOM	DES203 Design Thinking and Problem Solving	3		1	Naisargi Shah	02:30 pm - 04:00 pm Mon, Fri, 07:00 pm - 08:30 pm Tue
34	AMSOM	ECO100 Microeconomics	3		1	Gaurav Bhattacharya	05:30 pm - 07:00 pm Tue, Thu

35	AMSOM	ECO100 Microeconomics [Bi-Semester]	3		2	Sonal Yadav	11:00 am - 12:30 pm Tue, Thu
36	AMSOM	ECO100 Microeconomics [Bi-Semester]	3		3	Sonal Yadav	02:30 pm - 04:00 pm Tue, Thu
37	AMSOM	ECO100 Microeconomics [Bi-Semester]	3		4	Sharvari Dalal	11:00 am - 12:30 pm Mon, Wed
38	AMSOM	ECO100 Microeconomics [Bi-Semester]	3		5	Sabyasachi Das	02:30 pm - 04:00 pm Tue, Thu
39	AMSOM	ECO100 Microeconomics [Bi-Semester]	3		6	Atman Shah	05:30 pm - 07:00 pm Mon, Fri
40	AMSOM	ECO100 Microeconomics [Bi-Semester]	3		7	Eshan Shenolikar	09:30 am - 11:00 am Mon, Wed
41	AMSOM	ECO110 Macroeconomics	3		1	Sonal Yadav	11:00 am - 12:30 pm Mon, Wed
42	AMSOM	ECO110 Macroeconomics	3		2	Supratim Das Gupta	02:30 pm - 04:00 pm Tue, Thu
43	AMSOM	ECO110 Macroeconomics	3		3	Eshan Shenolikar	08:00 am - 09:30 am Mon, Wed
44	AMSOM	ECO110 Macroeconomics	3		4	Priyoma Mustafi	08:00 am - 09:30 am Tue, Thu
45	AMSOM	ECO110 Macroeconomics	3		5	Priyoma Mustafi	09:30 am - 11:00 am Tue, Thu
46	AMSOM	ECO200 Managerial Economics	3		1	Rahul Singh	08:00 am - 09:30 am Tue, Thu
47	AMSOM	ECO201 Intermediate Microeconomics	3		1	Sabyasachi Das	09:30 am - 11:00 am Tue, Thu
48	AMSOM	ECO212 Intermediate Macroeconomics	3		1	Supratim Das Gupta Sharvari Dalal	02:30 pm - 04:00 pm Mon, Fri
49	AMSOM	ECO213 Macroeconomics and Monetary Policy	3		1	Mita Suthar	11:00 am - 12:30 pm Wed, Fri

50	AMSOM	ECO220 Econometrics	3	EPP100 Microeconomics, MAT142 Introductory Calculus,, MAT142 Introductory Calculus,, MAT 146 Intermediate Calculus,, MAT142 Introductory Calculus,, MAT 146 Intermediate Calculus,	1	Aranya Chakraborty	11:00 am - 12:30 pm Tue, Thu, 09:30 am - 11:00 am Sat
51	AMSOM	ECO250 History of Economic Thought	3	EPP100 Microeconomics,	1	Nilesh Jain	07:00 pm - 08:30 pm Mon, Fri
52	AMSOM	ECO280 Indian Economy: Performance and Policies	3	EPP100 Microeconomics,	1	Jeemol Unni	02:30 pm - 04:00 pm Tue, Thu
53	AMSOM	ECO321 Empirical Research Methods In Economics	3		1	Aranya Chakraborty	04:00 pm - 05:30 pm Tue, Thu, 11:00 am - 12:30 pm Fri
54	AMSOM	ECO500 Economics For Managers	3		1	Rahul Singh	09:30 am - 11:00 am Mon, Wed
55	AMSOM	ECO500 Economics For Managers	3		2	Moumita Roy	02:30 pm - 04:00 pm Mon, Fri
56	AMSOM	ECO501 Intermediate Microeconomics	3		1	Moumita Roy	09:30 am - 11:00 am Tue, Thu
57	AMSOM	ECO504 Industrial Organisation	3	EPP501 Intermediate Microeconomics,	1	Sanjay Banerji	11:00 am - 12:30 pm Fri, Tue, Thu
58	AMSOM	ECO507 Models of Political Economy	3		1	Abhinandan Sinha, Gaurav Bhattacharya	05:30 pm - 07:00 pm Mon, Fri
59	AMSOM	ECO510 Environmental and Resource Economics	3		1	Supratim Das Gupta	05:30 pm - 07:00 pm Tue, Thu
60	AMSOM	ECO511 Intermediate Macroeconomics	3		1	Rahul Rao	02:30 pm - 04:00 pm Tue, Thu
61	AMSOM	ECO544 Urban Informal Economy [First Quarter]	1.5		1	Jeemol Unni	01:00 pm - 02:30 pm Mon, Wed

62	AMSOM	ECO550 History of Economic Thought	3		1	Nilesh Jain	07:00 pm - 08:30 pm Mon, Fri
63	AMSOM	ECO620 Empirical Research Methods in Economics	3	TOD501 Introductory Statistics, TOD601 Quantitative Research Methods,	1	Aranya Chakraborty	04:00 pm - 05:30 pm Tue, Thu, 11:00 am - 12:30 pm Fri
64	AMSOM	ENV501 Environment and Sustainability [Second Quarter]	1		1	Minal Pathak	09:30 am - 11:00 am Mon, Wed
65	AMSOM	ENV501 Environment and Sustainability [Second Quarter]	1		2	Minal Pathak	09:30 am - 11:00 am Tue, Thu
66	AMSOM	ENV502 Sustainable Development Goals	3		1	Minal Pathak	11:00 am - 12:30 pm Tue, Thu
67	AMSOM	ENV591 Sustainability and Circular Economy [Second Quarter]	1.5		1	Supratim Das Gupta	01:00 pm - 02:30 pm Mon, Wed
68	AMSOM	ETH201 Ethics	3		1	Chirag Trivedi, Deepti Sharma	01:00 pm - 02:30 pm Mon, Fri
69	AMSOM	ETH201 Ethics	3		2	Nimit Thaker, Preeti Maneck	09:30 am - 11:00 am Mon, Fri
70	AMSOM	ETH201 Ethics	3		3	Nimit Thaker, Preeti Maneck	02:30 pm - 04:00 pm Tue, Thu
71	AMSOM	ETH201 Ethics	3		4	Tana Trivedi, Krishna Mehta	09:30 am - 11:00 am Mon, Wed
72	AMSOM	ETH201 Ethics	3		5	Tana Trivedi, Krishna Mehta	09:30 am - 11:00 am Tue, Thu
73	AMSOM	FAC104 Tally ERP 9.0	2		1	Rakesh Sharma	08:00 am - 09:30 am Mon, Fri
74	AMSOM	FAC104 Tally ERP 9.0	2		2	Rakesh Sharma	08:00 am - 09:30 am Tue, Thu
75	AMSOM	FAC112 Corporate Accounting	3		1	Heli Shah	11:00 am - 12:30 pm Mon, Fri
76	AMSOM	FAC112 Corporate Accounting	3		2	Heli Shah	01:00 pm - 02:30 pm Mon, Fri
77	AMSOM	FAC112 Corporate Accounting	3		3	Heli Shah	09:30 am - 11:00 am Tue, Thu
78	AMSOM	FAC114 Financial Accounting	3		1	Mona Vora	09:30 am - 11:00 am Mon, Fri
79	AMSOM	FAC114 Financial Accounting	3		2	Mona Vora	09:30 am - 11:00 am Tue, Thu
80	AMSOM	FAC114 Financial Accounting [Bi-Semester]	3		3	Mona Vora	01:00 pm - 02:30 pm Mon, Fri

81	AMSOM	FAC114 Financial Accounting [Bi-Semester]	3		4	Heli Shah	09:30 am - 11:00 am Mon, Fri
82	AMSOM	FAC114 Financial Accounting [Bi-Semester]	3		5	Heli Shah	11:00 am - 12:30 pm Tue, Thu
83	AMSOM	FAC114 Financial Accounting [Bi-Semester]	3		6	Heli Shah	01:00 pm - 02:30 pm Tue, Thu
84	AMSOM	FAC114 Financial Accounting [Bi-Semester]	3		7	Vaibhav Kadia	11:00 am - 12:30 pm Fri, Wed
85	AMSOM	FAC121 Direct Taxes	3		1	Nimit Thaker	11:00 am - 12:30 pm Tue, Thu
86	AMSOM	FAC121 Direct Taxes	3		2	Ruja Sutaria	09:30 am - 11:00 am Wed, Fri
87	AMSOM	FAC121 Direct Taxes	3		3	Ruja Sutaria	11:00 am - 12:30 pm Wed, Fri
88	AMSOM	FAC124 Fundamentals of GST [First Quarter]	1.5		1	Nimit Thaker	04:00 pm - 05:30 pm Mon, Fri
89	AMSOM	FAC125 Business Taxation [Second Quarter]	1.5		1	Nimit Thaker	04:00 pm - 05:30 pm Mon, Fri
90	AMSOM	FAC133 Financial Management	3		1	Mona Vora	11:00 am - 12:30 pm Mon, Fri
91	AMSOM	FAC133 Financial Management	3		2	Mona Vora	11:00 am - 12:30 pm Tue, Thu
92	AMSOM	FAC133 Financial Management	3		3	Mona Vora	01:00 pm - 02:30 pm Tue, Thu
93	AMSOM	FAC133 Financial Management	3		4	Tanya Jain	09:30 am - 11:00 am Mon, Wed, 01:00 pm - 02:30 pm Sat
94	AMSOM	FAC133 Financial Management	3		5	Tanya Jain	01:00 pm - 02:30 pm Mon, Wed, 02:30 pm - 04:00 pm Sat
95	AMSOM	FAC215 Cost & Management Accounting	3		1	Abhishek Shah	09:30 am - 11:00 am Tue, Thu
96	AMSOM	FAC215 Cost & Management Accounting	3		2	Abhishek Shah	11:00 am - 12:30 pm Tue, Thu
97	AMSOM	FAC225 Corporate Governance & Sustainability	3		1	Narendra Kushwaha	11:00 am - 12:30 pm Tue, Thu
98	AMSOM	FAC241 Banking	3		1	Hetal Jhaveri	01:00 pm - 02:30 pm Wed, Fri
99	AMSOM	FAC244 Financial Markets	3	OR FAC131 Financial Management - I	1	Saumil Shah	09:30 am - 11:00 am Tue, Thu
100	AMSOM	FAC244 Financial Markets	3	OR FAC131 Financial Management - I	2	Saumil Shah	11:00 am - 12:30 pm Tue, Thu

101	AMSOM	FAC311 Analysing Corporate Annual Report	3		1	Vibha Tripathi	09:30 am - 11:00 am Mon, Fri
102	AMSOM	FAC331 Corporate Finance	3		1	Hetal Jhaveri	02:30 pm - 04:00 pm Tue, Thu
103	AMSOM	FAC336 Working Capital Strategy [Second Quarter]	1.5		1	Niraj Athavle	09:30 am - 11:00 am Tue, Thu
104	AMSOM	FAC512 Financial Accounting [First Quarter]	1.5		1	Parag Patel	11:00 am - 12:30 pm Mon, Wed
105	AMSOM	FAC512 Financial Accounting [First Quarter]	1.5		2	Parag Patel	01:00 pm - 02:30 pm Mon, Wed
106	AMSOM	FAC513 Management Accounting [Second Quarter]	1.5		1	Poonam Dugar	11:00 am - 12:30 pm Mon, Wed
107	AMSOM	FAC513 Management Accounting [Second Quarter]	1.5		2	Poonam Dugar	11:00 am - 12:30 pm Tue, Thu
108	AMSOM	FAC533 Corporate Investments and Value Creation	3		1	Deepak Krishnan	01:00 pm - 02:30 pm Mon, Wed
109	AMSOM	FAC534 Strategic Corporate Finance	3	OR FAC133 Financial Management	1	Kinshuk Saurabh	11:00 am - 12:30 pm Tue, Thu
110	AMSOM	FAC611 Financial Analysis	3		1	Vibha Tripathi	09:30 am - 11:00 am Tue, Thu
111	AMSOM	FAC630 Behavioural Finance	3		1	Mayank Patel	08:00 am - 09:30 am Wed, Fri
112	AMSOM	FAC633 Security Analysis and Portfolio Management	3		1	Deepak Krishnan	11:00 am - 12:30 pm Wed, Mon
113	AMSOM	FAC633 Security Analysis and Portfolio Management	3		2	Vinodh Madhavan	02:30 pm - 04:00 pm Mon, Fri
114	AMSOM	FAC634 International Finance	3		1	Deepak Krishnan	05:30 pm - 07:00 pm Tue, Thu
115	AMSOM	FAC635 Financial Modelling	3		1	Deepak Krishnan	09:30 am - 11:00 am Wed, Fri
116	AMSOM	FAC644 Fintech Ventures	3	OR FAC133 Financial Management	1	Kinshuk Saurabh	02:30 pm - 04:00 pm Tue, Thu
117	AMSOM	FBE101 Introduction to Entrepreneurship	1.5		1	Darshna Padia	01:00 pm - 02:30 pm Fri, Sat, 02:30 pm - 04:00 pm Sat
118	AMSOM	FBE502 Design Thinking [First Quarter]	1.5		1	Ruchie Kothari	05:30 pm - 07:00 pm Mon, Fri
119	AMSOM	FBE508 Intellectual Property Rights	3		1	Krishna Mehta	11:00 am - 12:30 pm Mon, Wed

120	AMSOM	FBE511 Family Business Management and Policies [First Quarter]	1.5		1	Abhijit Kothari	05:30 pm - 07:00 pm Tue, Thu
121	AMSOM	FBE512 Succession Planning and Professionalization [Second Quarter]	1.5		1	Abhijit Kothari	05:30 pm - 07:00 pm Tue, Thu
122	AMSOM	FBE602 New Venture Creation [First Quarter]	1.5		1	Subhalaxmi Mohapatra	05:30 pm - 07:00 pm Tue, Thu
123	AMSOM	HRT511 Heritage Discourses and Frameworks	3		1	Molly Kaushal, Abhimanyu Pandey	11:00 am - 12:30 pm Tue, Thu
124	AMSOM	HRT512 Conservation Principles and Processes	3		1	Aditya Prakash Kanth	11:00 am - 12:30 pm Wed, 09:30 am - 11:00 am Wed
125	AMSOM	HRT531 Cultural Resource Mapping & Documentation	3		1	Aditya Prakash Kanth	09:30 am - 11:00 am Tue, Thu
126	AMSOM	HRT533 Heritage and Business: Designing Heritage Experiences	1.5	None	1	Ioannis Poullos	08:00 am - 09:30 am Tue, Thu, Wed
127	AMSOM	HRT623 Nature & Environment Conservation and Management	1.5		1	Aditya Ghosh	11:00 am - 12:30 pm Mon, Fri
128	AMSOM	HRT634 Arts, Culture and Heritage – A Managerial Economics Perspective	3		1	A Damodaran	09:30 am - 11:00 am Fri, Mon, 01:00 pm - 02:30 pm Tue, Thu, 04:00 pm - 05:30 pm Tue, Thu
129	AMSOM	INS511 Perspective on Market Research Sector	1	None	1	Ravi Miglani	08:00 am - 09:30 am Sat
130	AMSOM	INS512 Perspective on Real Estate Sector [Second Quarter]	1		1	Parag Patel	11:00 am - 12:30 pm Sat
131	AMSOM	INS514 Perspective on Banking	1		1	Hetal Jhaveri	01:00 pm - 02:30 pm Sat, 02:30 pm - 04:00 pm Sat
132	AMSOM	INS521 Perspective on Energy Sector	1		1	Jinraj Joshipura	09:30 am - 11:00 am Sat
133	AMSOM	MGT105 History of Indian Business	3		1	Tana Trivedi	05:30 pm - 07:00 pm Tue, Thu
134	AMSOM	MGT111 Identity and Behaviour	3		1	Harnain Arora	02:30 pm - 04:00 pm Mon, Fri
135	AMSOM	MGT111 Identity and Behaviour	3		2	Harnain Arora	05:30 pm - 07:00 pm Mon, Fri

136	AMSOM	MGT111 Identity and Behaviour [Bi-Semester]	3		3	Jatin Christie	09:30 am - 11:00 am Mon, Fri
137	AMSOM	MGT111 Identity and Behaviour [Bi-Semester]	3		4	Jatin Christie	09:30 am - 11:00 am Tue, Thu
138	AMSOM	MGT111 Identity and Behaviour [Bi-Semester]	3		5	Sonali Narbariya	09:30 am - 11:00 am Tue, Thu
139	AMSOM	MGT111 Identity and Behaviour [Bi-Semester]	3		6	Sonali Narbariya	11:00 am - 12:30 pm Tue, Thu
140	AMSOM	MGT111 Identity and Behaviour [Bi-Semester]	3		7	Kritika Manshani	09:30 am - 11:00 am Mon, Wed
141	AMSOM	MGT112 Organisation Processes	3		1	Amrita Bihani	01:00 pm - 02:30 pm Mon, Wed
142	AMSOM	MGT112 Organisation Processes	3		2	Amrita Bihani	09:30 am - 11:00 am Mon, Wed
143	AMSOM	MGT112 Organisation Processes	3		3	Nirali Pandit	11:00 am - 12:30 pm Tue, Thu
144	AMSOM	MGT112 Organisation Processes	3		4	Shreshtha Dabral	08:00 am - 09:30 am Tue, Thu
145	AMSOM	MGT112 Organisation Processes	3		5	Shreshtha Dabral	09:30 am - 11:00 am Tue, Thu
146	AMSOM	MGT112 Organisation Processes	3		6	Kritika Manshani	11:00 am - 12:30 pm Mon, Wed, Fri
147	AMSOM	MGT121 Human Capital Management	3		1	Harish Premi	09:30 am - 11:00 am Mon, Wed, Fri
148	AMSOM	MGT121 Human Capital Management	3		2	Harish Premi	11:00 am - 12:30 pm Mon, Wed, Fri
149	AMSOM	MGT121 Human Capital Management	3		3	Vedant Dev	02:30 pm - 04:00 pm Mon, Fri
150	AMSOM	MGT121 Human Capital Management	3		4	Vedant Dev	08:00 am - 09:30 am Mon, Fri
151	AMSOM	MGT136 Indian Legal System [First Quarter]	1.5		1	Krishna Mehta	01:00 pm - 02:30 pm Tue, Thu
152	AMSOM	MGT221 Strategic Human Resource Management	3	MGT121 Human Resource Management	1	Amrita Bihani	02:30 pm - 04:00 pm Tue, Thu

153	AMSOM	MGT223 Industrial Relations and Employment Laws	3	MGT121 Human Resource Management, MGT221 Strategic Human Resource Management	1	Nimit Thaker	04:00 pm - 05:30 pm Tue, Thu
154	AMSOM	MGT234 Civil & Property Laws	3		1	Krishna Mehta	11:00 am - 12:30 pm Tue, Thu
155	AMSOM	MGT239 Legal and Ethical Aspects of Digital Technologies [First Quarter]	1.5		1	Nimit Thaker	05:30 pm - 07:00 pm Mon, Fri
156	AMSOM	MGT328 People Analytics	3	MGT121 Human Resource Management, OR	1	Vedant Dev	08:00 am - 09:30 am Tue, Thu
157	AMSOM	MGT341 Competitive Strategy [First Quarter]	1.5		1	Kunal Mankodi	08:00 am - 09:30 am Tue, Thu
158	AMSOM	MGT341 Competitive Strategy [First Quarter]	1.5		2	Kunal Mankodi	02:30 pm - 04:00 pm Tue, Thu
159	AMSOM	MGT341 Competitive Strategy [First Quarter]	1.5		3	Kunal Mankodi	02:30 pm - 04:00 pm Mon, Fri, 11:00 am - 12:30 pm Sat
160	AMSOM	MGT504 Behavioural Lab I	0.75		1	Benjamin Clarence	09:30 am - 11:00 am Fri
161	AMSOM	MGT504 Behavioural Lab I	0.75		2	Benjamin Clarence	11:00 am - 12:30 pm Fri
162	AMSOM	MGT505 Problem Solving for Social Change [First Quarter]	1.5		1	Sudhir Pandey	04:00 pm - 05:30 pm Tue, Thu, 09:30 am - 11:00 am Sat
163	AMSOM	MGT505 Problem Solving for Social Change [First Quarter]	1.5		2	Sudhir Pandey	01:00 pm - 02:30 pm Tue, Thu
164	AMSOM	MGT506 Digital Thinking [First Quarter]	1.5		1	Nilesh Jain	09:30 am - 11:00 am Mon, Fri
165	AMSOM	MGT506 Digital Thinking [Second Quarter]	1.5		2	Nilesh Jain	02:30 pm - 04:00 pm Mon, Fri
166	AMSOM	MGT509 Business Models [Second Quarter]	1.5		1	Malhar Mehta	04:00 pm - 05:30 pm Tue, Thu
167	AMSOM	MGT509 Business Models [Second Quarter]	1.5		2	Malhar Mehta	05:30 pm - 07:00 pm Tue, Thu
168	AMSOM	MGT511 Organisational Behaviour [First Quarter]	1.5		1	Samvet Kuril	02:30 pm - 04:00 pm Mon, Fri, 04:00 pm - 05:30 pm Fri

169	AMSOM	MGT511 Organisational Behaviour [First Quarter]	1.5		2	Samvet Kuril	02:30 pm - 04:00 pm Tue, Thu, 09:30 am - 11:00 am Sat, 11:00 am - 12:30 pm Sat
170	AMSOM	MGT513 Leadership	3		1	Jatin Christie	02:30 pm - 04:00 pm Mon, Fri, Sat, 01:00 pm - 02:30 pm Sat
171	AMSOM	MGT521 People Practices and Decision Making [First Quarter]	1.5	OR MGT112 Organisation Processes	1	Ekta Sharma	09:30 am - 11:00 am Mon, Wed, 08:00 am - 09:30 am Fri, 01:00 pm - 02:30 pm Thu
172	AMSOM	MGT521 People Practices and Decision Making [First Quarter]	1.5	OR MGT112 Organisation Processes	2	Ekta Sharma	09:30 am - 11:00 am Tue, Thu, 01:00 pm - 02:30 pm Thu, 08:00 am - 09:30 am Fri
173	AMSOM	MGT522 Strategic Human Resource Management	3	OR MGT 121 Human Capital Management	1	Amrita Bihani	02:30 pm - 04:00 pm Tue, Thu
174	AMSOM	MGT532 Industrial Relations and Labour Laws	3	OR MGT121 Human Resource Management	1	Nimit Thaker	04:00 pm - 05:30 pm Tue, Thu
175	AMSOM	MGT621 Selection and Testing [First Quarter]	1.5		1	Ekta Sharma	11:00 am - 12:30 pm Wed, Fri, 07:00 pm - 08:30 pm Thu
176	AMSOM	MGT623 International HRM [Second Quarter]	1.5		1	Ekta Sharma	11:00 am - 12:30 pm Wed, Fri
177	AMSOM	MGT626 Sustainable Human Resource Management [First Quarter]	1.5		1	Ekta Sharma	11:00 am - 12:30 pm Tue, Thu, 04:00 pm - 05:30 pm Sat
178	AMSOM	MGT628 People Analytics	3		1	Vedant Dev	08:00 am - 09:30 am Tue, Thu
179	AMSOM	MGT643 International Business Strategy: Challenges and Opportunities	3		1	Sanjay Yashroy	11:00 am - 12:30 pm Fri, 01:00 pm - 02:30 pm Fri, Sat, 02:30 pm - 04:00 pm Sat
180	AMSOM	MKT103 Marketing Management	3		1	Kunal Mankodi	08:00 am - 09:30 am Wed, Fri
181	AMSOM	MKT103 Marketing Management	3		2	Prithwiraj Mukherjee	04:00 pm - 05:30 pm Tue, Thu
182	AMSOM	MKT103 Marketing Management	3		3	Mahendra Singh Rao	02:30 pm - 04:00 pm Mon, Fri
183	AMSOM	MKT103 Marketing Management	3		4	Jinal Parikh	02:30 pm - 04:00 pm Tue, Thu

184	AMSOM	MKT103 Marketing Management	3		5	Priyanka Shah Harivallabhdas	01:00 pm - 02:30 pm Mon, Fri
185	AMSOM	MKT312 Essentials of Marketing Research	3		1	Sujo Thomas	01:00 pm - 02:30 pm Mon, Fri
186	AMSOM	MKT312 Essentials of Marketing Research	3		2	Sujo Thomas	02:30 pm - 04:00 pm Mon, Fri
187	AMSOM	MKT321 Marketing of Services	3	MKT101 Marketing Management - I, OR MKT103 Marketing Management	1	Darshna Padia	02:30 pm - 04:00 pm Mon, Fri
188	AMSOM	MKT324 Retail Management	3		1	Sujo Thomas	04:00 pm - 05:30 pm Mon, Fri
189	AMSOM	MKT341 Marketing Strategy for Consumer Behaviour	3		1	Zalak Shah	04:00 pm - 05:30 pm Tue, Thu, 09:30 am - 11:00 am Sat, 11:00 am - 12:30 pm Sat
190	AMSOM	MKT352 Advertising: Crafting Contagious Content	3		1	Darshna Padia	05:30 pm - 07:00 pm Mon, Fri
191	AMSOM	MKT501 Products, Brands and Markets	3		1	Bijal Mehta	09:30 am - 11:00 am Tue, Thu
192	AMSOM	MKT501 Products, Brands and Markets	3		2	Bijal Mehta	02:30 pm - 04:00 pm Tue, Thu
193	AMSOM	MKT601 Business to Business Marketing	3	MKT101 Marketing Management - I, MKT102 Marketing Management - II,	1	Zalak Shah	11:00 am - 12:30 pm Tue, Thu, 01:00 pm - 02:30 pm Sat, 02:30 pm - 04:00 pm Wed, 04:00 pm - 05:30 pm Wed
194	AMSOM	MKT601 Business to Business Marketing	3	MKT101 Marketing Management - I, MKT102 Marketing Management - II,	2	Zalak Shah	01:00 pm - 02:30 pm Mon, Fri, Sat, Wed, 02:30 pm - 04:00 pm Wed
195	AMSOM	MKT625 Business of Sports - Marketing and Consumer Behaviour Perspective	3	OR MKT501 Marketing Management	1	Mahendra Singh Rao	11:00 am - 12:30 pm Mon, Fri
196	AMSOM	MKT631 Sales and Distribution Management	3		1	Kavita Saxena	11:00 am - 12:30 pm Mon, Fri

197	AMSOM	MKT631 Sales and Distribution Management	3		2	Kavita Saxena	02:30 pm - 04:00 pm Mon, Fri
198	AMSOM	MKT642 Interdisciplinary Approach To Consumer Understanding	3		1	Ravi Miglani	08:00 am - 09:30 am Tue, Thu
199	AMSOM	MKT642 Interdisciplinary Approach To Consumer Understanding	3		2	Ravi Miglani	08:00 am - 09:30 am Wed, Fri
200	AMSOM	MKT642 Interdisciplinary Approach To Consumer Understanding	3		3	Priyanka Shah Harivallabhdas	11:00 am - 12:30 pm Tue, Thu
201	AMSOM	MKT642 Interdisciplinary Approach To Consumer Understanding	3		4	Priyanka Shah Harivallabhdas	09:30 am - 11:00 am Tue, Thu
202	AMSOM	MKT654 Strategic Brand Management	3	MKT101 Marketing Management - I,	1	Kavita Saxena	01:00 pm - 02:30 pm Wed, Fri
203	AMSOM	MKT654 Strategic Brand Management	3	MKT101 Marketing Management - I,	2	Kavita Saxena	01:00 pm - 02:30 pm Mon, 11:00 am - 12:30 pm Wed
204	AMSOM	MKT703 Eye-tracking in Behavioural Research [Second Quarter]	1.5		1	Prithwiraj Mukherjee	11:00 am - 12:30 pm Wed, 01:00 pm - 02:30 pm Wed
205	AMSOM	SOM700 Introduction to Research in Management Areas	3		1	Mahendra Singh Rao	01:00 pm - 02:30 pm Tue, Thu
206	AMSOM	TOD205 Database Management for Managers	3		1	Vinay Vachharajani	04:00 pm - 05:30 pm Mon, Fri
207	AMSOM	TOD212 Decision Sciences	3	STA100 Probability,,,,STA102 Probability and Random Variables	1	Vivek Bhatt	02:30 pm - 04:00 pm Mon, Fri
208	AMSOM	TOD212 Decision Sciences	3	STA100 Probability,,,,STA102 Probability and Random Variables	2	Vivek Bhatt	05:30 pm - 07:00 pm Mon, Fri

209	AMSOM	TOD212 Decision Sciences	3	STA100 Probability,,,,STA102 Probability and Random Variables	3	Ab Raju	08:00 am - 09:30 am Tue, Thu
210	AMSOM	TOD212 Decision Sciences	3	STA100 Probability,,,,STA102 Probability and Random Variables	4	Vivek Bhatt	11:00 am - 12:30 pm Tue, Thu, 07:00 pm - 08:30 pm Tue
211	AMSOM	TOD212 Decision Sciences	3	STA100 Probability,,,,STA102 Probability and Random Variables	5	Vivek Bhatt	01:00 pm - 02:30 pm Mon, Wed
212	AMSOM	TOD212 Decision Sciences	3	STA100 Probability,,,,STA102 Probability and Random Variables	6	Vivek Bhatt	04:00 pm - 05:30 pm Mon, Fri
213	AMSOM	TOD221 Operations Management	3		1	Ab Raju	09:30 am - 11:00 am Mon, Wed
214	AMSOM	TOD221 Operations Management	3		2	Ab Raju	11:00 am - 12:30 pm Mon, Wed
215	AMSOM	TOD221 Operations Management	3		3	Ab Raju	02:30 pm - 04:00 pm Tue, Thu
216	AMSOM	TOD221 Operations Management	3		4	Ab Raju	04:00 pm - 05:30 pm Tue, Thu
217	AMSOM	TOD221 Operations Management	3		5	Subhankar Saha	02:30 pm - 04:00 pm Mon, Fri
218	AMSOM	TOD221 Operations Management	3		6	Subhankar Saha	04:00 pm - 05:30 pm Tue, Thu
219	AMSOM	TOD310 Predictive Analytics for Business	3	STA100 Probability,	1	Amit Singh	04:00 pm - 05:30 pm Tue, Thu
220	AMSOM	TOD322 Supply Chain Management	3		1	Ab Raju	08:00 am - 09:30 am Mon, Wed
221	AMSOM	TOD324 Service Operations Management	3		1	Sanjoy Mukerji	09:30 am - 11:00 am Tue, Thu

222	AMSOM	TOD326 Project Management	3		1	Jinraj Joshipura	01:00 pm - 02:30 pm Mon, Wed
223	AMSOM	TOD326 Project Management	3		2	Jinraj Joshipura	09:30 am - 11:00 am Tue, Thu
224	AMSOM	TOD326 Project Management	3		3	Sanjoy Mukerji	11:00 am - 12:30 pm Tue, Thu
225	AMSOM	TOD331 Supply Chain Analytics	3		1	Shahrukh Anjum	04:00 pm - 05:30 pm Tue, Thu
226	AMSOM	TOD501 Descriptive and Inferential Statistics [First Quarter]	1.5		1	Amit Das	11:00 am - 12:30 pm Tue, Thu
227	AMSOM	TOD501 Descriptive and Inferential Statistics [First Quarter]	1.5		2	Abhinandan Sinha	05:30 pm - 07:00 pm Tue, Thu
228	AMSOM	TOD504 Mathematical Methods for Economics	3		1	Pravakar Paul	05:30 pm - 07:00 pm Mon, Fri
229	AMSOM	TOD522 Supply Chain Management [First Quarter]	1.5		1	Sanjoy Mukerji	02:30 pm - 04:00 pm Tue, Thu, 07:00 pm - 08:30 pm Tue
230	AMSOM	TOD524 Operations Management	2		1	Sanjoy Mukerji	11:00 am - 12:30 pm Wed, Fri
231	AMSOM	TOD524 Operations Management	2		2	Sanjoy Mukerji	01:00 pm - 02:30 pm Wed, Fri
232	AMSOM	TOD526 Project Management	2		1	Padmin Buch	09:30 am - 11:00 am Tue, Thu
233	AMSOM	TOD531 Analytics Lab	1		1	Jinal Parikh	04:00 pm - 05:30 pm Tue, Thu
234	AMSOM	TOD531 Analytics Lab	1		2	Jinal Parikh	05:30 pm - 07:00 pm Tue, Thu
235	AMSOM	TOD533 Introduction to AI: A Management Perspective	3		1	Amit Das	09:30 am - 11:00 am Mon, Wed
236	AMSOM	TOD601 ANOVA and Regression [Second Quarter]	1.5		1	Abhinandan Sinha	05:30 pm - 07:00 pm Tue, Thu
237	SAS	BIO101 Introductory Biology [Bi-Semester]	3		1	Pooja Shah	09:30 am - 11:00 am Mon, Wed
238	SAS	BIO104 Environmental Science	3	None OR None	1	Shomen Mukherjee	04:00 pm - 05:30 pm Mon, Fri
239	SAS	BIO106 Introductory Biology practical [Second Quarter]	1.5		1	Manish Grover, Ripal Surajkar	01:00 pm - 02:30 pm Mon, Fri, 02:30 pm - 04:00 pm Mon, Fri
240	SAS	BIO106 Introductory Biology practical [Second Quarter]	1.5		2	Manish Grover, Ripal Surajkar	09:30 am - 11:00 am Tue, Thu, 11:00 am - 12:30 pm Tue, Thu

241	SAS	BIO107 Concepts of Biology	3		1	Pooja Shah	08:00 am - 09:30 am Mon, Wed
242	SAS	BIO107 Concepts of Biology	3		2	Pooja Shah	08:00 am - 09:30 am Tue, Thu
243	SAS	BIO107 Concepts of Biology	3		3	Pooja Shah	08:00 am - 09:30 am Fri, 09:30 am - 11:00 am Fri
244	SAS	BIO114 Microscopy and Imaging	3	BIO101 Introductory Biology, OR	1	Ritesh Shukla	11:00 am - 12:30 pm Tue, Thu
245	SAS	BIO200 Human Physiology	3		1	Souvik Sen Gupta	09:30 am - 11:00 am Tue, Thu
246	SAS	BIO203 Biochemistry and Genetics Practicals	3	None	1	Brinda Panchal, Ripal Surajkar	09:30 am - 11:00 am Mon, Wed, 11:00 am - 12:30 pm Mon, Wed
247	SAS	BIO203 Biochemistry and Genetics Practicals	3	None	2	Brinda Panchal, Ripal Surajkar	11:00 am - 12:30 pm Thu, Tue, 09:30 am - 11:00 am Thu, Tue
248	SAS	BIO205 Molecular biology and Bioinformatics practical	3		1	Prachi Dave, Vidhi Shukla	02:30 pm - 04:00 pm Mon, Fri, 01:00 pm - 02:30 pm Mon, Fri
249	SAS	BIO205 Molecular biology and Bioinformatics practical	3		2	Prachi Dave, Vidhi Shukla	01:00 pm - 02:30 pm Tue, Thu, 02:30 pm - 04:00 pm Tue, Thu
250	SAS	BIO206 Physiology Laboratory Course	1.5		1	Souvik Sen Gupta	09:30 am - 11:00 am Fri, 11:00 am - 12:30 pm Fri
251	SAS	BIO206 Physiology Laboratory Course	1.5		2	Souvik Sen Gupta	09:30 am - 11:00 am Wed, 11:00 am - 12:30 pm Wed
252	SAS	BIO209 Basic Biochemistry	3		1	Ashim Rai	02:30 pm - 04:00 pm Mon, Fri
253	SAS	BIO211 Molecular Biology	3		1	Ashutosh Kumar	11:00 am - 12:30 pm Mon, Fri
254	SAS	BIO213 Basics of Bioinformatics	3		1	Balaji Prakash	04:00 pm - 05:30 pm Tue, Thu
255	SAS	BIO260 Introduction to Plant Biology [Bi-Semester]	3		1	Bhuvan Pathak	11:00 am - 12:30 pm Mon, Fri
256	SAS	BIO261 Plant Biology Practical [Bi-Semester]	1.5		1	Bhuvan Pathak	02:30 pm - 04:00 pm Tue, 01:00 pm - 02:30 pm Tue
257	SAS	BIO261 Plant Biology Practical [Bi-Semester]	1.5		2	Bhuvan Pathak	02:30 pm - 04:00 pm Thu, 01:00 pm - 02:30 pm Thu
258	SAS	BIO310 Genetics	3		1	Krishna Bs Swamy	01:00 pm - 02:30 pm Tue, Thu

259	SAS	BIO360 Introduction to Biological Rhythms	3		1	Subhabrata Moitra	11:00 am - 12:30 pm Mon, Fri
260	SAS	BIO500 Recombinant DNA Technology	3	BIO203 Molecular Biology	1	Ashutosh Kumar	01:00 pm - 02:30 pm Tue, Thu
261	SAS	BIO543 Developmental Biology	3		1	Vivek Tanavde	01:00 pm - 02:30 pm Mon, Wed
262	SAS	BIO553 Animal Behaviour [Bi-Semester]	3		1	Ratna Ghosal	04:00 pm - 05:30 pm Tue, Thu
263	SAS	BIO554 Forensic Biotechnology	3		1	Ritesh Shukla	11:00 am - 12:30 pm Mon, Fri
264	SAS	BIO575 Special topics in the Life Sciences: Scientific texts in context--Papers in Microbiology	3		1	Neeraja Sankaran	04:00 pm - 05:30 pm Mon, Fri
265	SAS	BIO600 Evolutionary Biology	3		1	Subhash Rajpurohit	02:30 pm - 04:00 pm Tue, Thu
266	SAS	BIO666 Conservation biology: a real world understanding via case studies [Bi-Semester]	3		1	Ratna Ghosal	05:30 pm - 07:00 pm Tue, Thu
267	SAS	BIO775 Special topics in the Life Sciences: Scientific texts in context--Papers in Microbiology	4		1	Neeraja Sankaran	04:00 pm - 05:30 pm Mon, Fri
268	SAS	CSC210 Introduction to Data Structures and Algorithms	4		1	Shashi Kant Shankar	11:00 am - 12:30 pm Mon, Wed, Fri
269	SAS	GER 111 Conversational German I	3		1	Akshay Chudasama	05:30 pm - 07:00 pm Tue, Thu, Fri
270	SAS	GER 111 Conversational German I	3		2	Akshay Chudasama	08:00 am - 09:30 am Tue, Thu, Mon
271	SAS	HST101 Ahmedabad as a Gateway to the World	3		2	Khusdeep Kaur Malhotra Ayesha Sheth	01:00 pm - 02:30 pm Wed, Fri
272	SAS	HST101 Ahmedabad as a Gateway to the World [Bi-Semester]	3		1	Darshini Mahadevia, Aparajith Ramnath	09:30 am - 11:00 am Mon, Wed
273	SAS	HST102 The Birth and Development of Civilisations in the Indian Subcontinent	4		1	Manomohini Dutta	04:00 pm - 05:30 pm Tue, Thu, 09:30 am - 11:00 am Wed

274	SAS	HST105 Introduction to the history of biology and medicine [Bi-Semester]	4		1	Neeraja Sankaran	09:30 am - 11:00 am Mon, Wed, Fri
275	SAS	HST201 Trade and Religion in the Indian Ocean World	4	None	1	Murari Jha	11:00 am - 12:30 pm Tue, Thu, Wed
276	SAS	HST220 Science, Technology, and the Making of the Modern World	4		1	Aparajith Ramnath	01:00 pm - 02:30 pm Mon, Wed, Fri
277	SAS	HST312 The Making of Early Modern India, 1300-1800	3		1	Ayesha Sheth	02:30 pm - 04:00 pm Tue, Thu
278	SAS	IHS701 Key Concepts in Social Theory	3		1	Darshini Mahadevia, Khusdeep Kaur Malhotra	11:00 am - 12:30 pm Mon, 01:00 pm - 02:30 pm Mon, 09:30 am - 11:00 am Mon
279	SAS	IHS725 Sanskrit for Research	3		1	Shishir Saxena	04:00 pm - 05:30 pm Mon, Fri
280	SAS	LIT105 Urdu Prose and Poetry	3	None	1	Salmabanu Shaikh	04:00 pm - 05:30 pm Mon, Fri
281	SAS	LIT230 Gira Gujarati	3		1	Chirag Trivedi	04:00 pm - 05:30 pm Tue, Thu
282	SAS	MAT123 Precalculus [Bi-Semester]	3		1	Gurudatt Gaur	08:00 am - 09:30 am Mon, Fri
283	SAS	MAT123 Precalculus [Bi-Semester]	3		2	Gurudatt Gaur	09:30 am - 11:00 am Tue, Thu
284	SAS	MAT123 Precalculus [Bi-Semester]	3		3	Eshita Mazumdar	02:30 pm - 04:00 pm Tue, Thu
285	SAS	MAT123 Precalculus [Bi-Semester]	3		4	Indrajit Ghosh	02:30 pm - 04:00 pm Mon, Fri
286	SAS	MAT123 Precalculus [Bi-Semester]	3		5	Pramath Anamby	09:30 am - 11:00 am Wed, Fri
287	SAS	MAT123 Precalculus [Bi-Semester]	3		6	Jitesh Jhavar	01:00 pm - 02:30 pm Tue, Thu
288	SAS	MAT123 Precalculus [Bi-Semester]	3		7	Pravakar Paul	11:00 am - 12:30 pm Wed, Fri
289	SAS	MAT123 Precalculus [Bi-Semester]	3		8	Loyimee Gogoi	09:30 am - 11:00 am Mon, Wed
290	SAS	MAT123 Precalculus [Bi-Semester]	3		9	Loyimee Gogoi	01:00 pm - 02:30 pm Mon, Wed

291	SAS	MAT142 Introductory Calculus	3		1	Bhaktida Trivedi	09:30 am - 11:00 am Wed, Fri
292	SAS	MAT142 Introductory Calculus	3		2	Bhaktida Trivedi	11:00 am - 12:30 pm Mon, Wed
293	SAS	MAT142 Introductory Calculus	3		3	Dinesh Barot	01:00 pm - 02:30 pm Wed, Fri
294	SAS	MAT142 Introductory Calculus	3		4	Dinesh Barot	02:30 pm - 04:00 pm Tue, Thu
295	SAS	MAT142 Introductory Calculus	3		5	Loyimee Gogoi	08:00 am - 09:30 am Tue, Thu
296	SAS	MAT142 Introductory Calculus [Bi-Semester]	3		6	Ashwin Pande	01:00 pm - 02:30 pm Mon, Fri
297	SAS	MAT146 Intermediate Calculus [Bi-Semester]	3		1	Ashwin Pande	01:00 pm - 02:30 pm Tue, Thu
298	SAS	MAT165 Gateway to Abstract Reasoning [Bi-Semester]	3		1	Manjil Saikia	11:00 am - 12:30 pm Wed, Fri
299	SAS	MAT215 Elementary Number Theory and Cryptography	3		1	Manjil Saikia	02:30 pm - 04:00 pm Mon, Fri
300	SAS	MAT256 Differential Equations	3		1	Pravakar Paul	04:00 pm - 05:30 pm Mon, Fri
301	SAS	MAT268 Introduction to Mathematical Biology	3		1	Sutapa Mukherji	04:00 pm - 05:30 pm Tue, Thu
302	SAS	MAT281 Multivariable Calculus	3		1	Mitaxi Mehta	08:00 am - 09:30 am Wed, 05:30 pm - 07:00 pm Fri
303	SAS	MAT281 Multivariable Calculus [Bi-Semester]	4		1	Pramath Anamby	01:00 pm - 02:30 pm Mon, Wed, Fri
304	SAS	MAT312 Abstract Algebra	4		1	Alok Shukla	11:00 am - 12:30 pm Mon, Wed, Fri
305	SAS	MAT334 Introductory Real Analysis	4		1	Eshita Mazumdar	01:00 pm - 02:30 pm Mon, Wed, Fri
306	SAS	MAT485 Introduction to Quantum Computing	3		1	Alok Shukla	09:30 am - 11:00 am Mon, Wed
307	SAS	MAT585 Introduction to Quantum Computing	3	None	1	Alok Shukla	09:30 am - 11:00 am Mon, Wed
308	SAS	MAT730 Combinatorial Representation Theory	3		1	Manjil Saikia	04:00 pm - 05:30 pm Mon, Fri
309	SAS	MAT741 Advanced Algebra II	3		1	Pramath Anamby	09:30 am - 11:00 am Tue, Thu
310	SAS	MUS101 Inside Indian Music	3		1	Prachi Vaidya	02:30 pm - 04:00 pm Mon, Fri
311	SAS	MUS101 Inside Indian Music	3		2	Prachi Vaidya	04:00 pm - 05:30 pm Mon, Fri

312	SAS	MUS103 Culturing the Voice	3		1	Prachi Vaidya	02:30 pm - 04:00 pm Tue, Thu
313	SAS	MUS103 Culturing the Voice	3		2	Prachi Vaidya	04:00 pm - 05:30 pm Tue, Thu
314	SAS	PER101 Introduction to Persian I	3		1	Ayesha Sheth	04:00 pm - 05:30 pm Tue, Thu
315	SAS	PER201 Intermediate Scholastic Persian - I	3		1	Ayesha Sheth	11:00 am - 12:30 pm Wed
316	SAS	PHI175 Is Philosophy Dead? Great Ideas Across Space and Time [Bi-Semester]	3		1	Shishir Saxena	09:30 am - 11:00 am Tue, Thu
317	SAS	PHL310 Religious Art of South Asia	3		1	Aditya Chaturvedi	01:00 pm - 02:30 pm Tue, Thu
318	SAS	PHY112 Electromagnetic Theory	4		1	Raghwinder Singh	08:00 am - 09:30 am Tue, Thu, 05:30 pm - 07:00 pm Fri
319	SAS	PHY121 Laboratory Physics - Mechanics [Bi-Semester]	3	None	1	Samyaday Choudhury	09:30 am - 11:00 am Tue, Thu, 11:00 am - 12:30 pm Tue, Thu
320	SAS	PHY212 Oscillations, Waves and Optics	3		1	Gaurav Goswami	05:30 pm - 07:00 pm Tue, Thu
321	SAS	PHY230 Introductory Astronomy	3		1	Samyaday Choudhury	04:00 pm - 05:30 pm Tue, Thu
322	SAS	PHY310 Quantum Mechanics I	4		1	Pinaki Majumdar	01:00 pm - 02:30 pm Mon, Wed, Fri
323	SAS	PHY313 Thermodynamics	4		1	Gaurav Goswami	01:00 pm - 02:30 pm Tue, Thu, 09:30 am - 11:00 am Thu
324	SAS	PHY635 Introduction to Plasma Physics	3		1	Soumen Ghosh	02:30 pm - 04:00 pm Mon, Fri
325	SAS	PHY701 Mathematical Methods for Physics	3		1	Raghavan Rangarajan	11:00 am - 12:30 pm Mon, Wed
326	SAS	PSY101 Introduction to Psychology	3		1	Nithin George	11:00 am - 12:30 pm Mon, Fri
327	SAS	PSY101 Introduction to Psychology [Bi-Semester]	3		2	Rucha Sarwate	11:00 am - 12:30 pm Tue, Thu
328	SAS	PSY161 Personality and Individual Differences	3		1	Rachna Mishra	01:00 pm - 02:30 pm Tue, Thu

329	SAS	PSY161 Personality and Individual Differences [Bi-Semester]	3		2	Rachna Mishra	01:00 pm - 02:30 pm Mon, Fri
330	SAS	PSY205 Evolutionary Psychology	3		1	Nagireddy Neelakanteswar Reddy	05:30 pm - 07:00 pm Tue, Thu
331	SAS	PSY210 Cognitive Psychology	3		1	Divita Singh	04:00 pm - 05:30 pm Tue, Thu
332	SAS	PSY215 Developmental Psychology	3		1	Shilpa Pandit	11:00 am - 12:30 pm Tue, Thu
333	SAS	PSY280 Abnormal Psychology	3		1	Rucha Sarwate	04:00 pm - 05:30 pm Mon, Fri
334	SAS	PSY310 Lab in Psychology	3	OR RES101 Introduction to Research Methodology	1	Nithin George	09:30 am - 11:00 am Tue, Thu
335	SAS	PSY312 Cognitive Neuroscience [Bi-Semester]	3		1	Rupesh Chillale	08:00 am - 09:30 am Tue, Thu
336	SAS	PSY321 Sensation and Perception	3		1	Nithin George	09:30 am - 11:00 am Mon, Wed
337	SAS	PSY350 Counselling Psychology	3	PSY252 Health Psychology, PSY272 Industrial and Organisational Psychology, PSY280 Abnormal Psychology OR PSY280 Abnormal Psychology OR PSY252 Health Psychology	1	Rucha Sarwate	01:00 pm - 02:30 pm Mon, Fri
338	SAS	PSY705 History and Systems of Psychology	3		1	Nagireddy Neelakanteswar Reddy	07:00 pm - 08:30 pm Thu
339	SAS	PSY796 Individual Study - Affective states and Attentional Control	3		1	Divita Singh	07:00 pm - 08:00 pm Fri
340	SAS	PSY796 Individual Study- Trauma and Psychotherapy	3		1	Rucha Sarwate	07:00 pm - 08:30 pm Fri

341	SAS	PVA100 Fundamentals of Theatre and Theatricality	3		1	Deepan Sivaraman	02:30 pm - 04:00 pm Tue, 04:00 pm - 05:30 pm Tue
342	SAS	PVA102 Exploring the Black Box [Bi-Semester]	3		1	Kathyayini Dash	01:00 pm - 02:30 pm Fri, 02:30 pm - 04:00 pm Fri
343	SAS	PVA112 Fundamentals of Drawing	3		1	Rajesh Naidu	02:30 pm - 04:00 pm Mon, Fri
344	SAS	PVA123 Fundamentals of Painting	3		1	Rajesh Naidu	11:00 am - 12:30 pm Mon, Fri
345	SAS	PVA126 Scenic Design for Theatre	3		1	Dushiyant Malik	09:30 am - 11:00 am Wed, 11:00 am - 12:30 pm Wed
346	SAS	PVA127 Street Theatre: Raise the Voice	3		1	Savan Zalariya	04:00 pm - 05:30 pm Mon, 05:30 pm - 07:00 pm Mon
347	SAS	PVA127 Street Theatre: Raise the Voice	3		2	Savan Zalariya	04:00 pm - 05:30 pm Tue, 05:30 pm - 07:00 pm Tue
348	SAS	PVA130 Fundamentals of Photography	3		1	Samir Pathak	08:00 am - 09:30 am Tue, 09:30 am - 11:00 am Tue
349	SAS	PVA130 Fundamentals of Photography	3		2	Samir Pathak	08:00 am - 09:30 am Wed, 09:30 am - 11:00 am Wed
350	SAS	PVA130 Fundamentals of Photography	3		3	Samir Pathak	04:00 pm - 05:30 pm Tue, 05:30 pm - 07:00 pm Tue
351	SAS	PVA171 Theatre and Society	3	None OR None	1	Kabir Thakore	04:00 pm - 05:30 pm Tue, 05:30 pm - 07:00 pm Tue
352	SAS	PVA171 Theatre and Society	3	None OR None	2	Kabir Thakore	04:00 pm - 05:30 pm Fri, 05:30 pm - 07:00 pm Fri
353	SAS	PVA181 Music and Society	3		1	Aditi Deo	11:00 am - 12:30 pm Tue, Thu
354	SAS	PVA200 Soundscapes [Bi-Semester]	3		1	Kathyayini Dash	01:00 pm - 02:30 pm Thu, 02:30 pm - 04:00 pm Thu
355	SAS	PVA203 Art, Culture and Heritage in a Globalized India.	3	OR COM106 Academic Writing	1	Aditi Deo	11:00 am - 12:30 pm Mon, Wed
356	SAS	RES101 Introduction to Research Methodology	4		1	Neelanjan Sircar, Khusdeep Kaur Malhotra	02:30 pm - 04:00 pm Tue, Thu, Fri

357	SAS	RES770 Research Writing & Critical Thinking across the Disciplines	3		1	Neeraja Sankaran	04:00 pm - 05:30 pm Thu, 02:30 pm - 04:00 pm Thu
358	SAS	SAN101 Learning Sanskrit Through Sanskrit Literature: Elementary	3		1	Shishir Saxena	02:30 pm - 04:00 pm Mon, Fri
359	SAS	SAN201 Reading Sanskrit Scholastic Texts: Elementary	3		1	Lisa Widdison	08:00 am - 09:30 am Mon, Wed
360	SAS	SPS102 Identity, Inequality and Difference [Bi-Semester]	4		1	Leya Mathew	05:30 pm - 07:00 pm Tue, Thu, 09:30 am - 11:00 am Fri
361	SAS	SPS103 Politics in Independent India [Bi-Semester]	3		1	Sarthak Bagchi	01:00 pm - 02:30 pm Wed, Fri
362	SAS	SPS202 Family, Community, Nation	3		1	Maryann Chacko	11:00 am - 12:30 pm Tue, Thu
363	SAS	SPS250 International Relations Theory [Bi-Semester]	3		1	Kasturi Chatterjee	05:30 pm - 07:00 pm Mon, Fri
364	SAS	SPS255 Introduction to Comparative Politics	3		1	Keita Omi	04:00 pm - 05:30 pm Tue, Thu
365	SAS	SPS261 Government Secrecy and intelligence Studies	3		1	Keita Omi	01:00 pm - 02:30 pm Tue, Thu
366	SAS	SPS263 Climate Change and Society	3		1	Suchismita Das	02:30 pm - 04:00 pm Tue, Thu
367	SAS	SPS266 India and the South Asian Matrix [First Quarter]	1.5		1	Sudeep Chakravarti	09:30 am - 11:00 am Mon, Wed
368	SAS	SPS300 Qualitative Research Methods	4		1	Safwan Amir	01:00 pm - 02:30 pm Tue, Thu, Wed
369	SAS	SPS303 Locating Globalisation	3		1	Maya Ratnam	11:00 am - 12:30 pm Mon, Wed
370	SAS	SPS352 Gender and Citizenship	3		1	Maryann Chacko	11:00 am - 12:30 pm Mon, Wed
371	SAS	SPS400 Thesis/Capstone Project Proposal Course	3		1	Maya Ratnam	11:00 am - 12:30 pm Tue, Thu
372	SAS	SPS401 Political Theory	3		1	Kasturi Chatterjee	02:30 pm - 04:00 pm Mon, Fri

373	SAS	SPS700 Research Methods in the Social Sciences	4		1	Safwan Amir	01:00 pm - 02:30 pm Tue, Thu, Wed
374	SAS	SPS752 Gender and Citizenship	3		1	Maryann Chacko	11:00 am - 12:30 pm Mon, Wed
375	SAS	STA100 Probability	3		1	Vinay Vachharajani	11:00 am - 12:30 pm Mon, Fri
376	SAS	STA100 Probability	3		2	Dinesh Barot	11:00 am - 12:30 pm Tue, Thu
377	SAS	STA101 Introductory Statistics	3		1	Vinay Vachharajani	11:00 am - 12:30 pm Tue, Thu
378	SAS	STA101 Introductory Statistics	3		2	Vinay Vachharajani	02:30 pm - 04:00 pm Mon, Fri
379	SAS	STA101 Introductory Statistics	3		3	Dinesh Barot	11:00 am - 12:30 pm Mon, Fri
380	SAS	STA101 Introductory Statistics	3		4	Bhaktida Trivedi	09:30 am - 11:00 am Tue, Thu
381	SAS	STA101 Introductory Statistics	3		5	Bhargav Adhvaryu	02:30 pm - 04:00 pm Tue, Thu
382	SAS	STA101 Introductory Statistics	3		6	Anil Patel	04:00 pm - 05:30 pm Mon, Fri
383	SAS	STA501 Applied Statistics	3		1	Chetkar Jha	02:30 pm - 04:00 pm Mon, Fri
384	SEAS	CHE100 The World of Chemical and Environmental Engineering	1.5		1	Snigdha Khuntia	09:30 am - 11:00 am Thu, 11:00 am - 12:30 pm Thu
385	SEAS	CHE101 Physical Chemistry [Second Quarter]	1.5		1	Aditi Singhal	02:30 pm - 04:00 pm Tue, Thu
386	SEAS	CHE204 Mass Transfer Operations - I	3		1	Arijit Ganguli	08:00 am - 09:00 am Mon, Wed, Fri
387	SEAS	CHE315 Mass Transfer	3		1	Arijit Ganguli	08:00 am - 09:00 am Mon, Wed, Fri
388	SEAS	CHE316 Chemical Kinetics and Reaction Engineering	3		1	Ask Sinha	04:00 pm - 05:30 pm Tue, Thu
389	SEAS	CHE317 Process Dynamic, Control and Automation [Second Quarter]	1		1	Dharamashi Rabari	02:00 pm - 03:00 pm Mon, Fri, 03:00 pm - 04:00 pm Mon, Fri
390	SEAS	CHE402 Chemical Process Simulation	2		1	Sridhar Dalai, Dharamashi Rabari	02:30 pm - 04:00 pm Thu, 04:00 pm - 05:30 pm Thu

391	SEAS	CHE440 Process Design and Economics	2	CHE201 Fluid Mechanics,CHE204 Mass Transfer Operations - I,CHE211 Material and Energy Balance,CHE300 Mass Transfer Operations - II, OR	1	Snigdha Khuntia	10:00 am - 11:00 am Sat, 03:00 pm - 04:00 pm Tue, 04:00 pm - 05:00 pm Tue
392	SEAS	CHE508 Advanced Transport Phenomena	3	CHE201 Fluid Mechanics,CHE204 Mass Transfer Operations - I,CHE300 Mass Transfer Operations - II, OR	1	Arijit Ganguli	02:30 pm - 04:00 pm Mon, 11:00 am - 12:30 pm Fri
393	SEAS	CHE571 Surfactant Science & nanotechnology	3	CHY100 Chemistry,SCS220 Organic Chemistry OR CHY100 Chemistry,SCS220 Organic Chemistry	1	Snigdha Khuntia	05:30 pm - 07:00 pm Sat
394	SEAS	CHY100 Chemistry	3	OR None	1	Aditi Singhal	08:00 am - 09:00 am Sat
395	SEAS	CMP651 Quality management and Inspection	3	CMP641 Testing and Design Validation,CMP642 Tool Design for Composites,	1	Ankush Sharma	12:00 pm - 01:00 pm Mon, Wed, Thu, Fri, 02:00 pm - 03:00 pm Mon, Wed, Thu, Fri, 03:00 pm - 04:00 pm Mon, Wed, Thu, Fri, 05:00 pm - 06:00 pm Thu, Fri, 04:00 pm - 05:00 pm Thu, Fri
396	SEAS	CSD105 Introduction to Data Science	3		1	Shefali Naik	04:00 pm - 05:30 pm Mon, Fri
397	SEAS	CSD105 Introduction to Data Science	3		2	Shefali Naik	04:00 pm - 05:30 pm Tue, Thu
398	SEAS	CSD105 Introduction to Data Science	3		3	Mitaxi Mehta	04:00 pm - 05:30 pm Tue, Thu
399	SEAS	CSD105 Introduction to Data Science	3		4	Mitaxi Mehta	04:00 pm - 05:30 pm Mon, Fri

400	SEAS	CSD105 Introduction to Data Science	3		5	Hiral Vegda	05:30 pm - 07:00 pm Tue, Thu
401	SEAS	CSD105 Introduction to Data Science	3		6	Dimple Rudakia	04:00 pm - 05:30 pm Mon, Fri
402	SEAS	CSD105 Introduction to Data Science	3		7	Dimple Rudakia	04:00 pm - 05:30 pm Tue, Thu
403	SEAS	CSD105 Introduction to Data Science	3		8	Shashi Kant Shankar	04:00 pm - 05:30 pm Mon, Fri
404	SEAS	CSD105 Introduction to Data Science	3		9	Kunjaj Gajjar	04:00 pm - 05:30 pm Mon, Fri
405	SEAS	CSD105 Introduction to Data Science	3		10	Kuntalkumar Patel	04:00 pm - 05:30 pm Tue, Thu
406	SEAS	CSD105 Introduction to Data Science	3		11	Srishti Sharma	08:00 am - 09:30 am Wed, Fri, 02:30 pm - 04:00 pm Thu, Sat, 09:30 am - 11:00 am Sat
407	SEAS	CSD105 Introduction to Data Science	3		12	Hiral Vegda	01:00 pm - 02:30 pm Wed, 05:30 pm - 07:00 pm Mon
408	SEAS	CSE100 Fundamentals of Computer Programming	3		1	Kuntalkumar Patel	07:00 pm - 08:00 pm Sat
409	SEAS	CSE103 The World of Computer Science and Engineering	2		1	Sanjay Chaudhary, Kuntalkumar Patel	06:00 pm - 07:00 pm Tue, 12:00 pm - 01:00 pm Sat, 01:00 pm - 02:00 pm Sat
410	SEAS	CSE103 The World of Computer Science and Engineering	2		2	Sanjay Chaudhary, Kuntalkumar Patel	06:00 pm - 07:00 pm Tue, 12:00 pm - 01:00 pm Sat, 01:00 pm - 02:00 pm Sat
411	SEAS	CSE103 The World of Computer Science and Engineering	2		3	Sanjay Chaudhary, Jayendra Bhalodiya	06:00 pm - 07:00 pm Tue, 12:00 pm - 01:00 pm Sat, 01:00 pm - 02:00 pm Sat
412	SEAS	CSE205 Data Structures	4	CSE100 Fundamentals of Computer Programming, CSE101 Object Oriented Programming Lab, OR	1	Mehul Raval	11:00 am - 12:00 pm Wed, 12:00 pm - 01:00 pm Wed

413	SEAS	CSE213 Digital Logic with Hardware Description Language	4		1	Harmeet Kaur	02:30 pm - 04:00 pm Tue, Thu, 09:00 am - 10:00 am Mon, 10:00 am - 11:00 am Mon
414	SEAS	CSE213 Digital Logic with Hardware Description Language	4		2	Harmeet Kaur	11:00 am - 12:30 pm Mon, Fri, 09:00 am - 10:00 am Mon, 10:00 am - 11:00 am Mon
415	SEAS	CSE300 Software Engineering	3		1	Shefali Naik	01:00 pm - 02:30 pm Mon, Wed
416	SEAS	CSE305 Data Structures	4	CSE103 Elements of Computer Science and Engineering, CSE203 Object Oriented Programming, CSE211 Discrete Mathematics,	1	Amit Nanavati, Mehul Raval	08:00 am - 09:30 am Tue, Thu, 11:00 am - 12:00 pm Wed, 12:00 pm - 01:00 pm Wed
417	SEAS	CSE305 Data Structures	4	CSE103 Elements of Computer Science and Engineering, CSE203 Object Oriented Programming, CSE211 Discrete Mathematics,	2	Amit Nanavati, Mehul Raval	11:00 am - 12:30 pm Tue, Thu, 11:00 am - 12:00 pm Wed, 12:00 pm - 01:00 pm Wed
418	SEAS	CSE332 Operating Systems	4	CSE205 Data Structures,	1	Mansukh Savaliya	11:00 am - 12:00 pm Fri, 12:00 pm - 01:00 pm Fri, 09:30 am - 11:00 am Fri, Thu
419	SEAS	CSE332 Operating Systems	4	CSE205 Data Structures,	2	Mansukh Savaliya	11:00 am - 12:00 pm Fri, 01:00 pm - 02:30 pm Fri, 12:00 pm - 01:00 pm Fri, 11:00 am - 12:30 pm Thu
420	SEAS	CSE332 Operating Systems	4	CSE205 Data Structures,	3	Mansukh Savaliya	08:00 am - 09:00 am Sat
421	SEAS	CSE340 Operating Systems	3	OR ENR106 Introduction to Programming	1	Susanta Tewari	11:00 am - 12:30 pm Tue, Thu

422	SEAS	CSE403 Introduction to Embedded Systems	3		1	Anurag Lakhiani	03:00 pm - 04:00 pm Mon, 04:00 pm - 05:00 pm Mon, 05:00 pm - 06:00 pm Mon, 09:30 am - 11:00 am Tue
423	SEAS	CSE403 Introduction to Embedded Systems	3		2	Anurag Lakhiani	05:00 pm - 06:00 pm Fri, 04:00 pm - 05:00 pm Fri, 03:00 pm - 04:00 pm Fri, 09:30 am - 11:00 am Tue
424	SEAS	CSE404 Operating Systems	4	CSE203 Object Oriented Programming,CSE302 Computer Organization and Architecture,,CSE205 Data Structures,	1	Mansukh Savaliya	11:00 am - 12:00 pm Fri, 12:00 pm - 01:00 pm Fri, 09:30 am - 11:00 am Fri, Thu, 03:00 pm - 04:00 pm Wed, 04:00 pm - 05:00 pm Wed
425	SEAS	CSE404 Operating Systems	4	CSE203 Object Oriented Programming,CSE302 Computer Organization and Architecture,,CSE205 Data Structures,	2	Mansukh Savaliya	11:00 am - 12:30 pm Thu, 01:00 pm - 02:30 pm Fri, 11:00 am - 12:00 pm Fri, 12:00 pm - 01:00 pm Fri, 03:00 pm - 04:00 pm Wed, 04:00 pm - 05:00 pm Wed
426	SEAS	CSE406 Theory of Computing	3	OR CSE305 Data Structures	1	Souvik Roy	11:00 am - 12:30 pm Tue, 02:30 pm - 04:00 pm Tue
427	SEAS	CSE406 Theory of Computing	3	OR CSE305 Data Structures	2	Souvik Roy	05:30 pm - 07:00 pm Tue, Thu
428	SEAS	CSE406 Theory of Computing	3	OR CSE305 Data Structures	3	Souvik Roy	04:00 pm - 05:30 pm Tue, Thu
429	SEAS	CSE500 Statistical Learning	3		1	Srikrishnan Divakaran	01:00 pm - 02:30 pm Mon, Fri, Wed, Thu
430	SEAS	CSE518 Artificial Intelligence	3	CSC 210 Introductions to Data Structures and Algorithms,,,,MAT 2XX Probability and Stochastic Process	1	Shashi Prabh	11:00 am - 12:30 pm Mon, Wed

431	SEAS	CSE521 Big Data Analytics	3		1	Maitrik Shah	09:30 am - 11:00 am Sat, 08:00 am - 09:30 am Sat, 02:30 pm - 04:00 pm Wed, 04:00 pm - 05:30 pm Wed
432	SEAS	CSE525 Theory of Computing	3	OR CSE205 Data Structures	1	Souvik Roy	11:00 am - 12:30 pm Tue, 02:30 pm - 04:00 pm Tue
433	SEAS	CSE525 Theory of Computing	3	OR CSE205 Data Structures	2	Souvik Roy	05:30 pm - 07:00 pm Tue, Thu
434	SEAS	CSE525 Theory of Computing	3	OR CSE205 Data Structures	3	Souvik Roy	04:00 pm - 05:30 pm Tue, Thu
435	SEAS	CSE526 Advanced Computer Arithmetic: Algorithms and Sub-systems	3		1	Mazad Zaveri	09:30 am - 11:00 am Tue, Thu
436	SEAS	CSE540 Cloud Computing	3	CSE332 Computer Networks,	1	Sanjay Chaudhary	09:30 am - 11:00 am Mon, Wed
437	SEAS	CSE601 Computational Thinking	3		1	Srishti Sharma	09:30 am - 11:00 am Wed, Fri, 01:00 pm - 02:30 pm Fri, Mon, 11:00 am - 12:30 pm Thu
438	SEAS	CSE605 Advanced Data Structures and Algorithm Analysis	4		1	Amit Nanavati	02:00 pm - 03:00 pm Tue, 03:00 pm - 04:00 pm Tue, 02:30 pm - 04:00 pm Wed, Thu
439	SEAS	CSE606 Cloud and Large-Scale Computing	3		1	Sanjay Chaudhary	09:30 am - 11:00 am Mon, Wed
440	SEAS	CSE618 Artificial Intelligence Laboratory	3		1	Maitrik Shah	08:00 am - 09:00 am Mon, Tue, 09:00 am - 10:00 am Mon, Tue
441	SEAS	ECE209 Digital Design	4		1	Harmeet Kaur	07:00 pm - 08:00 pm Sat
442	SEAS	ECE210 Signals and Systems	3		1	Abhishek Chakraborty	08:00 am - 09:30 am Tue, Thu
443	SEAS	ECE310 Wireless Communications	3		1	Dhaval Patel	09:30 am - 11:00 am Wed, 08:00 am - 09:30 am Wed
444	SEAS	ECE501 Digital Image Processing	3	ENR112 Linear Algebra Laboratory,	1	Mehul Raval	09:30 am - 11:00 am Mon, 11:00 am - 12:30 pm Mon
445	SEAS	ECE502 VLSI Design	3		1	Mazad Zaveri	08:00 am - 09:30 am Tue, Thu

446	SEAS	ECE504 Internet of Things	3		1	Anurag Lakhiani	11:00 am - 12:30 pm Thu, 09:30 am - 11:00 am Fri
447	SEAS	EEE201 Fields and Waves [Second Quarter]	1.5		1	Sanket Patel	11:00 am - 12:30 pm Tue, Thu
448	SEAS	EEE202 Materials in Electrical Engineering [First Quarter]	1.5		1	Mayuribala Mangrulkar	11:00 am - 12:30 pm Tue, Thu
449	SEAS	EEE203 Signals and Systems	3	ENR110 Differential Equations in Engineering,	1	Abhishek Chakraborty	08:00 am - 09:30 am Tue, Thu
450	SEAS	EEE701 Electronic Systems Design	3		1	Sanket Patel	05:00 pm - 06:00 pm Wed, 06:00 pm - 07:00 pm Wed, 07:00 pm - 08:00 pm Wed
451	SEAS	EEE702 Microwave Transistor Amplifiers: Analysis and Design	3		1	Sanket Patel	08:00 am - 09:00 am Sat, 09:00 am - 10:00 am Wed, 10:00 am - 11:00 am Wed
452	SEAS	EEE703 Microwave and RF Design of Wireless Systems	3		1	Sanket Patel	11:00 am - 12:00 pm Sat, 12:00 pm - 01:00 pm Sat
453	SEAS	EEE704 Design for Electromagnetic Compatibility	3		1	Sanket Patel	02:00 pm - 03:00 pm Sat, 03:00 pm - 04:00 pm Sat, 04:00 pm - 05:00 pm Sat
454	SEAS	EEE705 Fundamentals of Semiconductor Materials	3	EEE100 The World of Electrical Engineers, ENR104 Basic Electronic Circuits, ENR108 Materials and the Engineering World, ENR207 Electric and Magnetic circuits, ENRNNN Electronics and Magnetic Circuits and Devices,	1	Harmeet Kaur	11:00 am - 12:00 pm Tue, 12:00 pm - 01:00 pm Tue, 01:00 pm - 02:00 pm Tue

455	SEAS	ENR100 Visualisation	1.5		1	Shuja Ahmed	02:00 pm - 03:00 pm Sat, 03:00 pm - 04:00 pm Sat, 04:00 pm - 05:00 pm Sat, 05:00 pm - 06:00 pm Sat
456	SEAS	ENR101 Product Realisation	1.5		1	Harish Mirajkar	08:00 am - 09:00 am Sat, 09:00 am - 10:00 am Sat, 10:00 am - 11:00 am Sat, 11:00 am - 12:00 pm Sat
457	SEAS	ENR102 Electronics and Magnetic Circuits and Devices	4	None	1	Sanket Patel	05:30 pm - 07:00 pm Tue, Thu
458	SEAS	ENR105 Product Dissection and Realization	2		1	Deepshikha Singh	01:00 pm - 02:00 pm Fri, 02:00 pm - 03:00 pm Fri, 03:00 pm - 04:00 pm Fri, 04:00 pm - 05:00 pm Fri
459	SEAS	ENR105 Product Dissection and Realization	2		2	Harish Mirajkar	08:00 am - 09:00 am Sat, 09:00 am - 10:00 am Sat, 10:00 am - 11:00 am Sat, 11:00 am - 12:00 pm Sat
460	SEAS	ENR105 Product Dissection and Realization	2		3	Keyur Joshi	02:00 pm - 03:00 pm Sat, 03:00 pm - 04:00 pm Sat, 04:00 pm - 05:00 pm Sat, 05:00 pm - 06:00 pm Sat
461	SEAS	ENR106 Introduction to Programming	3		1	Jayendra Bhalodiya	01:00 pm - 02:00 pm Fri, 02:00 pm - 03:00 pm Fri, 08:00 am - 09:00 am Fri, Mon
462	SEAS	ENR106 Introduction to Programming	3		2	Kuntalkumar Patel	10:00 am - 11:00 am Sat, 11:00 am - 12:00 pm Sat, 08:00 am - 09:00 am Sat, 09:00 am - 10:00 am Sat
463	SEAS	ENR106 Introduction to Programming	3		3	Kuntalkumar Patel	01:00 pm - 02:00 pm Fri, 02:00 pm - 03:00 pm Fri, 08:00 am - 09:00 am Fri, Mon
464	SEAS	ENR106 Introduction to Programming	3		4	Jayendra Bhalodiya	08:00 am - 09:00 am Tue, Thu, Sat, 09:00 am - 10:00 am Sat

465	SEAS	ENR107 Digital Electronics and Microprocessors	3		1	Maryam Kavesghar	01:00 pm - 02:00 pm Mon, Wed, Fri, 02:00 pm - 03:00 pm Mon
466	SEAS	ENR108 Materials and the Engineering World	3		1	Mayuribala Mangrulkar, Shweta Agarwala	09:00 am - 10:00 am Wed, Mon, 10:00 am - 11:00 am Wed, Mon
467	SEAS	ENR108 Materials and the Engineering World	3		2	Mayuribala Mangrulkar, Shweta Agarwala	09:00 am - 10:00 am Wed, Fri, 10:00 am - 11:00 am Wed, Fri
468	SEAS	ENR110 Differential Equations in Engineering [Second Quarter]	1.5		1	Anamika Maurya	09:30 am - 11:00 am Tue, Thu
469	SEAS	ENR110 Differential Equations in Engineering [Second Quarter]	1.5		2	Mitaxi Mehta	09:30 am - 11:00 am Tue, Thu
470	SEAS	ENR114 Engineering Visualization and Drawing	2		1	Dharamashi Rabari	10:00 am - 11:00 am Sat, 11:00 am - 12:00 pm Sat, 08:00 am - 09:00 am Sat, 09:00 am - 10:00 am Sat
471	SEAS	ENR114 Engineering Visualization and Drawing	2		2	Vishal Nirgude	01:00 pm - 02:00 pm Fri, 02:00 pm - 03:00 pm Fri, 04:00 pm - 05:00 pm Fri, 03:00 pm - 04:00 pm Fri
472	SEAS	ENR114 Engineering Visualization and Drawing	2		3	Shuja Ahmed	02:00 pm - 03:00 pm Sat, 03:00 pm - 04:00 pm Sat, 04:00 pm - 05:00 pm Sat, 05:00 pm - 06:00 pm Sat
473	SEAS	ENR203 Material Science and Engineering	2		1	Mayuribala Mangrulkar	09:00 am - 10:00 am Wed, Fri, 10:00 am - 11:00 am Wed, Fri
474	SEAS	ENR204 Mechanics of Rigid Bodies	2		1	Bimal Das, Ashitava Ghosal	01:00 pm - 02:30 pm Mon, Wed, 01:00 pm - 02:00 pm Fri
475	SEAS	ENR206 Sensors, Instruments and Experimentation	2		1	Sanket Patel, Amol Gedam	03:00 pm - 04:00 pm Mon, 04:00 pm - 05:00 pm Mon, 05:00 pm - 06:00 pm Mon, 06:00 pm - 07:00 pm Mon

476	SEAS	ENR206 Sensors, Instruments and Experimentation	2		2	Vinod Mall	03:00 pm - 04:00 pm Mon, 04:00 pm - 05:00 pm Mon, 05:00 pm - 06:00 pm Mon, 06:00 pm - 07:00 pm Mon
477	SEAS	ENR206 Sensors, Instruments and Experimentation	2		3	Sanket Patel	03:00 pm - 04:00 pm Fri, 04:00 pm - 05:00 pm Fri, 05:00 pm - 06:00 pm Fri, 06:00 pm - 07:00 pm Fri
478	SEAS	ENR207 Electric and Magnetic circuits	3		1	Vinod Mall	05:30 pm - 07:00 pm Tue, Thu
479	SEAS	ENR207 Electric and Magnetic circuits	3		2	Sanket Patel	05:30 pm - 07:00 pm Tue, Thu
480	SEAS	ENR207 Electric and Magnetic circuits	3		3	Maryam Kaveshgar	04:00 pm - 05:30 pm Tue, Thu
481	SEAS	ENR208 Engineering Thermodynamics	2		2	Anamika Maurya	08:00 am - 09:00 am Sat
482	SEAS	ENR208 Engineering Thermodynamics [Second Quarter]	2		1	Anamika Maurya	11:00 am - 12:00 pm Mon, Wed, Fri, 02:00 pm - 03:00 pm Fri
483	SEAS	ENR209 Mechanics of Rigid Bodies [First Quarter]	2		1	Ashitava Ghosal, Akhand Rai	01:00 pm - 02:00 pm Fri, 01:00 pm - 02:30 pm Mon, Wed
484	SEAS	ENR209 Mechanics of Rigid Bodies [First Quarter]	2		2	Ashitava Ghosal, Keyur Joshi	01:00 pm - 02:00 pm Fri, 01:00 pm - 02:30 pm Mon, Wed
485	SEAS	ENR209 Mechanics of Rigid Bodies [First Quarter]	2		3	Ashitava Ghosal, Bimal Das	01:00 pm - 02:00 pm Fri, 01:00 pm - 02:30 pm Mon, Wed
486	SEAS	ENR210 Continuum Mechanics [Second Quarter]	2		1	Nand Kishore Singh	08:00 am - 09:00 am Mon, Wed, Fri, 12:00 pm - 01:00 pm Fri
487	SEAS	ENR211 Statistics for Engineers [First Quarter]	1.5		1	Shashi Prabh	09:30 am - 11:00 am Tue, Thu
488	SEAS	ENR211 Statistics for Engineers [First Quarter]	1.5		2	Jimit Patel	09:30 am - 11:00 am Tue, Thu
489	SEAS	ENR213 Control Engineering Fundamentals [First Quarter]	2		1	Ashitava Ghosal	11:00 am - 12:30 pm Mon, Wed, 11:00 am - 12:00 pm Fri

490	SEAS	ENR215 Design, Innovation and Making	2		1	Sunil Kale	03:00 pm - 04:00 pm Mon, 04:00 pm - 05:00 pm Mon, 05:00 pm - 06:00 pm Mon, 06:00 pm - 07:00 pm Mon
491	SEAS	ENR215 Design, Innovation and Making	2		2	Jinraj Joshipura	03:00 pm - 04:00 pm Fri, 04:00 pm - 05:00 pm Fri, 05:00 pm - 06:00 pm Fri, 06:00 pm - 07:00 pm Fri
492	SEAS	ENR215 Design, Innovation and Making	2		3	Nand Kishore Singh	03:00 pm - 04:00 pm Fri, 04:00 pm - 05:00 pm Fri, 05:00 pm - 06:00 pm Fri, 06:00 pm - 07:00 pm Fri
493	SEAS	ENR311 Heat Transfer and Applications	3	ENR210 Continuum Mechanics, OR	1	Sunil Kale	09:00 am - 10:00 am Mon, Wed, Fri
494	SEAS	ENR312 Control Engineering Laboratory [Second Quarter]	1.5	ENR209 Mechanics of Rigid Bodies, OR	1	Keyur Joshi	02:30 pm - 04:00 pm Mon, Fri, 04:00 pm - 05:30 pm Mon, Fri
495	SEAS	ENR314 Power Generation Technologies	3		1	Harish Mirajkar	04:00 pm - 05:30 pm Fri, 05:30 pm - 07:00 pm Fri
496	SEAS	ENR315 Corrosion Science and Engineering	3		1	Ask Sinha	01:00 pm - 02:30 pm Tue, Thu
497	SEAS	ENR709 Research Methodology in Engineering	3		1	Arijit Ganguli	02:30 pm - 04:00 pm Tue, Thu
498	SEAS	MAT101 Discrete Mathematics [Bi-Semester]	3		1	Eshita Mazumdar	11:00 am - 12:30 pm Tue, Thu
499	SEAS	MAT103 Calculus	3		1	Mitaxi Mehta	08:00 am - 09:30 am Wed, 05:30 pm - 07:00 pm Fri
500	SEAS	MAT203 Differential Equations and Linear Algebra	3	None	1	Anamika Maurya	08:00 am - 09:30 am Sat
501	SEAS	MAT283 Calculus	3		1	Mitaxi Mehta	05:30 pm - 07:00 pm Fri, 08:00 am - 09:30 am Wed
502	SEAS	MAT283 Calculus	3		2	Keyur Joshi, Pushpa Kumari	05:30 pm - 07:00 pm Thu, Fri

503	SEAS	MEC205 Materials and Process of Manufacture	3	ENR204 Mechanics of Rigid Bodies,CHE170 Introduction to Materials Science and Engineering,ENR100 Visualisation,ENR101 Product Realisation	1	Shuja Ahmed	04:00 pm - 05:30 pm Tue, Thu, 02:30 pm - 04:00 pm Tue
504	SEAS	MEC207 Materials and Manufacturing Processes-I [First Quarter]	2		1	Shuja Ahmed	02:30 pm - 04:00 pm Tue, 04:00 pm - 05:30 pm Tue, Thu
505	SEAS	MEC208 Materials and Manufacturing Processes-II [Second Quarter]	2	OR MEC207 MATERIALS AND MANUFACTURING PROCESSES-I	1	Shuja Ahmed	04:00 pm - 05:30 pm Tue, Thu, 02:30 pm - 04:00 pm Tue
506	SEAS	MEC303 Thermal Energy Systems	3		1	Vishal Nirgude	10:00 am - 11:00 am Mon, Wed, Fri
507	SEAS	MEC303 Thermal Energy Systems	3		2	Vishal Nirgude	05:30 pm - 07:00 pm Sat
508	SEAS	MEC305 Thermodynamics and Energy Conversion	3		1	Vishal Nirgude	10:00 am - 11:00 am Mon, Wed, Fri
509	SEAS	MEC403 Manufacturing Systems and Operations	2	MEC0000 Materials and Process of Manufacture,	1	Keyur Joshi	10:00 am - 11:00 am Mon, Wed
510	SEAS	MEC404 Integrated Mechanical Laboratory II	2		1	Akhand Rai, Bimal Das	03:00 pm - 04:00 pm Mon, 04:00 pm - 05:00 pm Mon, 05:00 pm - 06:00 pm Mon, 06:00 pm - 07:00 pm Mon
511	SEAS	MEC405 Learning Factory Project	3		1	Hemant Chouhan	09:30 am - 11:00 am Tue, Thu, 11:00 am - 12:30 pm Tue, Thu
512	SEAS	MEC700 Advanced Materials and Manufacturing Processes	3		1	Shuja Ahmed	01:00 pm - 02:30 pm Thu, 02:30 pm - 04:00 pm Thu
513	SPH	EPI610 Environmental Health	3		1	Anil Patel, Minal Pathak	11:00 am - 12:30 pm Tue, Thu
514	SPH	EPI611 Principles of Epidemiology	3		1	Subhabrata Moitra	11:00 am - 12:30 pm Tue, Thu

515	SPH	EPI702 Conducting Population-Based Research	3		1	Rajendra Gadhavi	02:30 pm - 04:00 pm Thu, Tue
516	SPH	EPI703 Epidemiological Data Analysis	3		1	Subhabrata Moitra, Chetkar Jha	04:00 pm - 05:30 pm Tue, Thu
517	SPH	EPI711 Infectious Disease Epidemiology	3		1	Rajendra Gadhavi	11:00 am - 12:30 pm Mon, Wed
518	SPH	EPI712 Noncommunicable Disease	3		1	Kaumudi Joshipura	09:00 am - 10:00 am Thu, 10:00 am - 11:00 am Thu, 04:00 pm - 05:00 pm Wed, 05:00 pm - 06:00 pm Wed
519	Undergraduate College	FDP101 Democracy and Justice	3		1	Darshna Padia, Deepan Sivaraman, Divita Singh, Nirzari Pandit, Pooja Shah, Raghwinder Singh	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
520	Undergraduate College	FDP101 Democracy and Justice	3		2	Apaar Kumar, Lakshmi Sreeram, Nagireddy Neelakanteswar Reddy, Noopur Thakur, Purabi Bhattacharya, Rahul Rao	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
521	Undergraduate College	FDP101 Democracy and Justice	3		3	Aditya Chaturvedi, Harnain Arora, Hiral Atwal, Preeti Maneck, Neelanjan Sircar, Ramya Srinivasan	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
522	Undergraduate College	FDP101 Democracy and Justice	3		4	Darshna Padia, Deepan Sivaraman, Divita Singh, Nirzari Pandit, Pooja Shah, Raghwinder Singh	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu

523	Undergraduate College	FDP101 Democracy and Justice	3		5	Apaar Kumar, Lakshmi Sreeram, Nagireddy Neelakanteswar Reddy, Noopur Thakur, Purabi Bhattacharya, Rahul Rao	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
524	Undergraduate College	FDP101 Democracy and Justice	3		6	Aditya Chaturvedi, Harnain Arora, Hiral Atwal, Preeti Maneck, Neelanjan Sircar, Ramya Srinivasan	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
525	Undergraduate College	FDP101 Democracy and Justice	3		7	Darshna Padia, Deepan Sivaraman, Divita Singh, Nirzari Pandit, Pooja Shah, Raghwinder Singh	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
526	Undergraduate College	FDP101 Democracy and Justice	3		8	Apaar Kumar, Lakshmi Sreeram, Nagireddy Neelakanteswar Reddy, Noopur Thakur, Purabi Bhattacharya, Rahul Rao	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
527	Undergraduate College	FDP101 Democracy and Justice	3		9	Aditya Chaturvedi, Harnain Arora, Hiral Atwal, Preeti Maneck, Sarthak Bagchi, Ramya Srinivasan	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
528	Undergraduate College	FDP101 Democracy and Justice	3		10	Darshna Padia, Deepan Sivaraman, Divita Singh, Nirzari Pandit, Pooja Shah, Raghwinder Singh	09:45 am - 12:30 pm Wed, Thu, Fri, Mon, Tue, 01:30 pm - 04:00 pm Thu, Mon, Tue

529	Undergraduate College	FDP101 Democracy and Justice	3		11	Apaar Kumar, Lakshmi Sreeram, Nagireddy Neelakanteswar Reddy, Noopur Thakur, Purabi Bhattacharya, Rahul Rao	01:30 pm - 04:00 pm Mon, Tue, Thu, 09:45 am - 12:30 pm Mon, Tue, Thu, Wed, Fri
530	Undergraduate College	FDP101 Democracy and Justice	3		12	Aditya Chaturvedi, Harnain Arora, Hiral Atwal, Preeti Maneck, Sarthak Bagchi, Ramya Srinivasan	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
531	Undergraduate College	FDP102 Environment and Climate Change	3		1	Aditya Vaishya, Balaji Prakash, Bimal Das, Kunal Mankodi, Soumen Ghosh, Jalaj Singh	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
532	Undergraduate College	FDP102 Environment and Climate Change	3		2	Pinaki Majumdar, Akhand Rai, Bhuvan Pathak, Binny Rawat, Saujanya Shyam, Jinal Parikh	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
533	Undergraduate College	FDP102 Environment and Climate Change	3		3	Aditya Vaishya, Balaji Prakash, Bimal Das, Kunal Mankodi, Soumen Ghosh, Jalaj Singh	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
534	Undergraduate College	FDP102 Environment and Climate Change	3		4	Pinaki Majumdar, Akhand Rai, Bhuvan Pathak, Binny Rawat, Saujanya Shyam, Jinal Parikh, Subhankar Saha	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu

535	Undergraduate College	FDP102 Environment and Climate Change	3		5	Aditya Vaishya, Jalaj Singh, Arijit Ganguli, Vinodh Madhavan, Sutapa Mukherji, Shomen Mukherjee	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
536	Undergraduate College	FDP102 Environment and Climate Change	3		6	Akhand Rai, Saujanya Shyam, Jinal Parikh, Anil Patel, Shuja Ahmed, Subhash Rajpurohit	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
537	Undergraduate College	FDP102 Environment and Climate Change	3		7	Aditya Vaishya, Jalaj Singh, Arijit Ganguli, Vinodh Madhavan, Sutapa Mukherji, Shomen Mukherjee	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
538	Undergraduate College	FDP102 Environment and Climate Change	3		8	Akhand Rai, Saujanya Shyam, Jinal Parikh, Anil Patel, Shuja Ahmed, Subhash Rajpurohit	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
539	Undergraduate College	FDP104 Water	3		1	Indrajit Ghosh, Safwan Amir, Sridhar Dalai, Vivek Bhatt, Saptam Patel, Mansee Bhargava	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
540	Undergraduate College	FDP104 Water	3		2	Vivek Bhatt, Chirag Trivedi, Aditi Singhal, Jatin Christie, Lisa Widdison, Nishi Nair	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
541	Undergraduate College	FDP104 Water	3		3	Indrajit Ghosh, Vivek Bhatt, Saptam Patel, Mansee Bhargava, Anamika Maurya, Leya Mathew	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu

542	Undergraduate College	FDP104 Water	3		4	Vivek Bhatt, Chirag Trivedi, Jatin Christie, Lisa Widdison, Nishi Nair, Arijit Ganguli	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
543	Undergraduate College	FDP104 Water	3		5	Safwan Amir, Krishna Bs Swamy, Mansee Bhargava, Saptam Patel, Sridhar Dalai, Vivek Bhatt	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
544	Undergraduate College	FDP104 Water	3		6	Vivek Bhatt, Chirag Trivedi, Aditi Singhal, Jatin Christie, Lisa Widdison, Nishi Nair	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
545	Undergraduate College	FDP104 Water	3		7	Vivek Bhatt, Saptam Patel, Mansee Bhargava, Anamika Maurya, Leya Mathew, Krishna Bs Swamy	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
546	Undergraduate College	FDP104 Water	3		8	Vivek Bhatt, Chirag Trivedi, Jatin Christie, Lisa Widdison, Nishi Nair, Arijit Ganguli	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
549	Undergraduate College	WEL100 Sports & Wellness: Athletics	1.5		1	Sonia Bathla	08:00 am - 09:30 am Mon, Fri
550	Undergraduate College	WEL100 Sports & Wellness: Athletics	1.5		2	Sonia Bathla	04:00 pm - 05:30 pm Mon, Fri
551	Undergraduate College	WEL100 Sports & Wellness: Athletics	1.5		3	Sonia Bathla	08:00 am - 09:30 am Tue, Thu
552	Undergraduate College	WEL100 Sports & Wellness: Athletics	1.5		4	Sonia Bathla	04:00 pm - 05:30 pm Tue, Thu
553	Undergraduate College	WEL101 Sports & Wellness: Badminton	1.5		1	Sonia Bathla	08:00 am - 09:30 am Mon, Fri
554	Undergraduate College	WEL101 Sports & Wellness: Badminton	1.5		2	Sonia Bathla	04:00 pm - 05:30 pm Mon, Fri

555	Undergraduate College	WEL101 Sports & Wellness: Badminton	1.5		3	Sonia Bathla	08:00 am - 09:30 am Tue, Thu
556	Undergraduate College	WEL101 Sports & Wellness: Badminton	1.5		4	Sonia Bathla	04:00 pm - 05:30 pm Tue, Thu
557	Undergraduate College	WEL102 Sports & Wellness: Basketball	1.5		1	Sonia Bathla	08:00 am - 09:30 am Mon, Fri
558	Undergraduate College	WEL102 Sports & Wellness: Basketball	1.5		2	Sonia Bathla	04:00 pm - 05:30 pm Mon, Fri
559	Undergraduate College	WEL102 Sports & Wellness: Basketball	1.5		3	Sonia Bathla	08:00 am - 09:30 am Tue, Thu
560	Undergraduate College	WEL102 Sports & Wellness: Basketball	1.5		4	Sonia Bathla	04:00 pm - 05:30 pm Tue, Thu
561	Undergraduate College	WEL102 Sports & Wellness: Basketball	1.5		5	Sonia Bathla	03:00 pm - 04:00 pm Wed, 04:00 pm - 05:00 pm Wed, 05:00 pm - 06:00 pm Wed
562	Undergraduate College	WEL103 Sports & Wellness: Cricket	1.5		1	Sonia Bathla	08:00 am - 09:30 am Mon, Fri
563	Undergraduate College	WEL103 Sports & Wellness: Cricket	1.5		2	Sonia Bathla	04:00 pm - 05:30 pm Mon, Fri
564	Undergraduate College	WEL103 Sports & Wellness: Cricket	1.5		3	Sonia Bathla	08:00 am - 09:30 am Tue, Thu
565	Undergraduate College	WEL103 Sports & Wellness: Cricket	1.5		4	Sonia Bathla	04:00 pm - 05:30 pm Tue, Thu
566	Undergraduate College	WEL104 Sports & Wellness: Football	1.5		1	Sonia Bathla	08:00 am - 09:30 am Mon, Fri
567	Undergraduate College	WEL104 Sports & Wellness: Football	1.5		2	Sonia Bathla	04:00 pm - 05:30 pm Mon, Fri
568	Undergraduate College	WEL104 Sports & Wellness: Football	1.5		3	Sonia Bathla	08:00 am - 09:30 am Tue, Thu
569	Undergraduate College	WEL104 Sports & Wellness: Football	1.5		4	Sonia Bathla	04:00 pm - 05:30 pm Tue, Thu
570	Undergraduate College	WEL104 Sports & Wellness: Football	1.5		5	Sonia Bathla	03:00 pm - 04:00 pm Wed, 04:00 pm - 05:00 pm Wed, 05:00 pm - 06:00 pm Wed

571	Undergraduate College	WEL105 Sports & Wellness: Frisbee	1.5		1	Sonia Bathla	08:00 am - 09:30 am Mon, Fri
572	Undergraduate College	WEL105 Sports & Wellness: Frisbee	1.5		2	Sonia Bathla	04:00 pm - 05:30 pm Mon, Fri
573	Undergraduate College	WEL105 Sports & Wellness: Frisbee	1.5		3	Sonia Bathla	08:00 am - 09:30 am Tue, Thu
574	Undergraduate College	WEL105 Sports & Wellness: Frisbee	1.5		4	Sonia Bathla	04:00 pm - 05:30 pm Tue, Thu
575	Undergraduate College	WEL109 Sports & Wellness: Volleyball	1.5		1	Sonia Bathla	08:00 am - 09:30 am Mon, Fri
576	Undergraduate College	WEL109 Sports & Wellness: Volleyball	1.5		2	Sonia Bathla	04:00 pm - 05:30 pm Mon, Fri
577	Undergraduate College	WEL109 Sports & Wellness: Volleyball	1.5		3	Sonia Bathla	08:00 am - 09:30 am Tue, Thu
578	Undergraduate College	WEL109 Sports & Wellness: Volleyball	1.5		4	Sonia Bathla	04:00 pm - 05:30 pm Tue, Thu
579	Undergraduate College	WEL109 Sports & Wellness: Volleyball	1.5		5	Sonia Bathla	03:00 pm - 04:00 pm Wed, 04:00 pm - 05:00 pm Wed, 05:00 pm - 06:00 pm Wed
580	Undergraduate College	WEL110 Sports & Wellness: Yoga	1.5		1	Sonia Bathla	08:00 am - 09:30 am Mon, Fri
581	Undergraduate College	WEL110 Sports & Wellness: Yoga	1.5		2	Sonia Bathla	04:00 pm - 05:30 pm Mon, Fri
582	Undergraduate College	WEL110 Sports & Wellness: Yoga	1.5		3	Sonia Bathla	08:00 am - 09:30 am Tue, Thu
583	Undergraduate College	WEL110 Sports & Wellness: Yoga	1.5		4	Sonia Bathla	04:00 pm - 05:30 pm Tue, Thu

**Course Descriptions**  
**Monsoon Semester 2025**

## **Amrut Mody School of Management**

### **COM101 - Effective Reading and Comprehension Skills**

**Credits: 3**

COM101 is the intermediate level of the University's communication courses designed to promote linguistic and academic development. This course is about reading and comprehension as well as about creative and formal writing. It aims at training students to develop strategies in reading for understanding, drawing inferences and analysing evidence, and general competence for writing formal essays. This course seeks to prepare students to communicate in English for success in their core courses and beyond graduation. The course uses literary pieces, academic articles, and audio-visual sources to develop comprehension, lateral and critical thinking, argumentative skills, and analytical ability that enable students to write well-researched essays while adhering to global standards of academic writing.

### **COM102 - Advanced Writing**

**Credits: 3**

This is an advanced writing course to train students in writing for academic and formal contexts. The modules of the course are designed to result in predefined writing outcomes with separate modules to address the writing requirements of the different Schools.

### **COM115 - Gender Sensitization**

**Credits: 3**

Gender is often (mis)understood as a set of concerns of and about 'women' and unfortunately in several discussions and considerations does not

clearly include men or gays, transgender persons, lesbians or intersex. Alongside working on the expansive range of what we mean by 'Gender', it is also imperative that discussions on everydayness of being a gender and becoming a gender are encouraged. Beyond awareness, the course intends to tickle the psyche and conditioning of the participants so as to make them agents of behaviour change - to contribute towards steering society that is more gender-equal and equitable.

### **COM202 - City as Text**

**Credits: 3**

In human history, the city has existed both as an idea and a place. Also, cities often develop around very different purposes. For instance, some cities become the space for national and international political activities, and some become the hub for business and trade. Other cities are primarily seen as sites for tourism and leisure. However, apart from these images, a city is also subject to continuous change—such as political, cultural, social and religious—which affect the lifestyle of city-dwellers and the image of a city from time to time. Viewed, thus, in the above perspective, City as Text course broadens the idea of a text as a landscape which includes cultural artifacts, institutions, and street cultures, socio-political and economic discourses. This course is interdisciplinary (provides economic perspective, cultural landscape analysis, political and social analysis, and historical background) and would mainly focus on urban formal and informal spaces such as commercial, residential and public. Learning processes in this course are characterized in three main ways: •Firstly, intellectual development – understanding the specific socio-economic, cultural, and political factors that have shaped the city and the

integration of theoretical and practical concepts. The urban environment enables a variety of different modes of learning, including guided student discovery and interpretation. •Secondly, technical development - students have the opportunity to hone observation and analytical skills, and competence in information processing and research, as they are brought into direct first-hand contact with the object of their investigation. And as an arena of encounter and interaction, the urban environment facilitates processes of personal development. •Finally, with the help of digital humanities pedagogy, students will be able to study the intersection between technology and the human experience using the digital tool. This pedagogy will help students to learn the nuances of computing methods to do humanities research.

### **COM501 - Managerial Communication**

**Credits: 1.5**

The mature students of MBA are expected to have basic knowledge in corporate communication. However, communication is one of those basic skills, which require constant improvement to suit the changing business environment. To provide the context for the corporate simulation, students have to join "AMCC Ltd" (a virtual company created for the course). Students are expected to perform various relevant on-the-job tasks for AMCC Ltd from the first day of the course. The course intends to provide essential communication skills such as listening, feedback, email writing, proposal writing, interpersonal sensitivity and presentations in a corporate culture context.

### **COM506 - Culture and Communication**

**Credits: 1.5**

Every environment whether it is social, political

or organizational has its own culture. When this environment meets the geographical boundaries of different cities, regions, countries, etc. a set of cultural value system, practices and its identity are developed. This course looks at the close relationship between culture and the role of communication in bearing it, the points of conflict between a culture and the globalized world, the role of culture in the world of business, etc. with a special focus on cultural behavior in sub-cultures in India and communication styles of working professionals.

### **COM507 - Communication Lab I**

**Credits: 0.75**

A successful professional in the present context believes in creating change by communicating thoughts effectively. Also, the world has been disrupted significantly, but effective communication remains a core element of business. The ability to communicate confidently and persuasively is critical to business success. This may seem more challenging to execute in the digital world, but the need is even more crucial than ever. Communication Lab aims to transform students from good communicators to effective one. Over the two years of their MBA degree, students will learn various strategies to enhance their speaking abilities and learn techniques to communicate in the virtual world effectively. Through hands-on activities, students will realise who they are as a person and the value of their words and body language. The Lab activities include group work, role-plays, individual speech analysis, and body language analysis. The emphasis of the Communication Lab is on helping students reflect on their styles and strategies rather than adopting others' traits.

### **DES101 - Fundamentals of Design**

**Credits: 3**

Fundamentals of design course provides an introduction in the field of design and its cross-disciplinary applications in industry and society. The intent is to give a foundation in design to students enrolled in any programme at the University by exposing them to the basic design fundamentals - principles, methods, processes and approaches. The course will expose the students to the user-centric approach that design adopts to address local and global challenges. They will learn to recognise that design is exploratory in nature and helps navigate ambiguity. It promotes new ways of looking at problems and coming up with solutions which are human-centered and inclusive. With practical exercises, the course will give an overview of the critical design thinking used for problem identification and opportunity mapping in any given context. Students will gain an understanding of design as a creative problem-solving tool to come up with holistic solutions for products, services, systems and experiences. The course is expected to rouse a student's interest in design. It will equip them with the necessary grounding to pursue design as a higher education or career pathway. Importantly, it will add a richer and diverse perspective to their understanding of their own field of Major education be it management, technology, sciences, humanities or social sciences. This course is open for students who are admitted to any programme at the University

### **DES102 - Visual Communication and Graphic Design**

**Credits: 3**

Visual/Creative communication in the digital age requires familiarisation and literacy that goes way beyond – beyond traditional practices. Digital is

no longer a grey area. It becomes inevitable that the brand language be effectively transformed from one media to another without changing the brand image. Throughout this course, the focus would be to expose students to ideas, applications, experiences and opportunities that are relevant to today's times. This course is primarily about creating visual artefacts that communicate effectively, but that does not mean you need to be an artist to succeed. Assessment will focus upon your efforts and your willingness to engage with your classmates to provide feedback and learn from one another. The more time you spend with the exercises in this course, the more skills you will develop as a visual communicator. Take the time to explore each exercise, take risks, and reiterate often. Don't allow your first attempt at any solution to be your only attempt. Fail early and fail often. Learning what doesn't work is an essential process in understanding what does work. This course is open for students who are admitted to any programme at the University.

### **DES103 - Biomimicry With Playfulness**

**Credits: 3**

Nature is the best example of good design. Taking inspiration from nature has been an important part of human evolution. There are many examples of good designs which have been inspired by nature. Biomimicry is studying elements from nature: form, colour, function, movement, life cycle, growth, etc. and using it as an inspiration for designing products, spaces, visuals for communication, systems, etc. Today in our modern world and our way of life, we are moving away from our natural connection with nature. It is all the more critical that we study its various aspects to learn and use it as an inspiration for good design. The whole area of Biomimicry, Bionics, etc. has developed a lot and there is a lot

more awareness about this field in current times. Toys are also recognized today as playing an important role in learning, development, building cultural connect and socio-emotional bonds and as part of the entertainment sector. Toys are a part of unstructured play and a means to create playful experiences. In this course, we will study nature with a new perspective and explore possibilities of using it to ideate and design toys or playful elements.

**DES201 - Strategic Branding and Packaging Design**  
**Credits: 3**

Brands exist in the consumers' minds and yet entice them to act as if it were a relationship of the heart. Brands often look for top-of-mind recall, but branding is an emotional connection that the audience forms with the brand and its message thereby creating a loyal following. It is not what you think and says but what they (the audience) perceive and believe. Therefore, branding is a function of strategy and psychology that embeds various facets of design in it. This course is designed to cover the fundamentals of branding and packaging to sensitize you to the decision-making process required to create a cohesive brand language. In a world dominated by brands, it is important to understand the key differentiating factor and then build an experience around it. Strategic Packaging design directly contributes to building a brand image by functional or aesthetic elements or by reinforcement of brand image by giving out an experience. This course will offer the tools and techniques required to formulate the right strategy for success. The pedagogy consists of interactive sessions with a healthy mix of fundamental theory, case studies, on the spot, and group assignments for hands-on learning. Your key

takeaway from this course will be the ability to make smart decisions for building a successful brand image and a long-term plan for a lasting brand impression.

**DES202 - Interaction Design and User Experience**  
**Credits: 3**

Interaction design is the practice of designing interactive digital products, environments, systems, and services. Ideally, interacting with technology would be as easy and intuitive as interacting with other humans. So, why do so many products and services fail to achieve this ideal? All products, whether digital or otherwise, must deliver a high-quality user experience or risk losing users to competitors. The focus of interaction design is on user-centred design based on the understanding of real users including their experiences, goals, needs, wants and tasks. The goal of interaction design is also to collect and analyse data to make informed interface design decisions which are critical to creating and delivering successful products, services and systems that fulfil the user/customer, technological and business needs.

**DES203 - Design Thinking and Problem Solving**  
**Credits: 3**

Design thinking is a methodology for creative problem-solving. Design Thinking provides a solution-based approach in tackling complex problems that occur around us by understanding human needs and re-framing the problems and solutions in human-centric ways keeping the business requirements in mind. It helps to adopt a hands-on approach to prototyping and testing. Companies globally are competing based

on customer experience. Design thinking has gained momentum in the business world's leading companies as they have embraced it to improve their customer experiences. Design Thinking induces a deep human-centric understanding to deliver delightful client experiences through the quick iteration of ideas and solutions.

**ECO100 - Microeconomics**  
**Credits: 3**

Microeconomics is an introductory undergraduate course aimed at teaching the fundamentals of microeconomics by introducing the students to concepts like supply and demand analysis, elasticity, theory of consumer choice, producer theory, market structure, competition, welfare and public goods. Students will also be introduced to the use of microeconomic applications to real world issues. This course is a core subject across the University undergraduate programs. It is an introductory course aimed at preparing students for understanding advanced economics as well as other related subjects of business and social sciences.

**ECO110 - Macroeconomics**  
**Credits: 3**

Macroeconomics describes how the economy as a whole functions and policies are formulated. The purpose of the course is to acquaint students with the basic concepts and theories of macroeconomics and orient them towards linkages between various economic indicators.

**ECO200 - Managerial Economics**  
**Credits: 3**

This course provides an overview of economic tools and analytical approaches that form the core

toolkit for informed managerial decisions. Topics covered include, inter alia, demand analysis, production and cost analysis, pricing, game theory, asymmetric information, and policy analysis. The course will rely on regression analysis and basic calculus techniques to formalize the key concepts. The economic tools and concepts developed in this course are indispensable for managerial decisions in a data driven business environment. This course is designed for students with no background in economics and aims to be an introductory course in managerial economics.

**ECO201 - Intermediate Microeconomics**  
**Credits: 3**

The course will cover consumer theory, producer theory and various aspects of market failure.

**ECO212 - Intermediate Macroeconomics**  
**Credits: 3**

This is an intermediate level macroeconomics course for UG students who are well acquainted with the basics of the macroeconomics subject. It covers the traditional models essential to understand how the economy functions in the short run, the medium run and the long run. The short and medium run analyses focus on the goods, labor, and money market equilibrium using IS-LM-PC model. For the long run analysis, students are introduced to the Solow-Swan growth model and its implications. Later, the course introduces the micro-founded approach to macroeconomics and how it can be utilized to explain economic fluctuations and policy decisions. Finally, it focuses upon the modus-operandi of both fiscal and monetary policy which includes understanding the government's budget constraint and the importance of inflation

targeting monetary policy of the Central Bank in an economy.

**ECO213 - Macroeconomics and Monetary Policy**  
**Credits: 3**

This course provides students with the theoretical framework required for an understanding of monetary theory and issues pertaining to design and implementation of macroeconomic policies under varying scenarios. Being a core course for the students of BBA Finance and Economics major, a particular emphasis is laid on the theory and practice of monetary policy framework by various central banks of major emerging and advanced economies. The focus is on topics like integration of macroeconomic variables, objectives of macroeconomic policies, monetary transmission mechanisms, financial stability in open economy set-up, and challenges arising due to the digitisation and ever-changing economic environment. This course provides students with the theoretical framework required for an understanding of monetary theory, and introduces them to the issues of monetary policy implementation in an economy. Students will learn about money supply, neutrality of money, inflation expectations and how monetary policy can help the economy adjust from one equilibrium to another. Students will work closely with the real-time data of the central bank during this course.

**ECO220 - Econometrics**  
**Credits: 3**

This course introduces students to the modern econometric techniques used to conduct empirical analysis in Economics. The course is designed to provide the students with the basic quantitative

techniques needed to undertake applied research projects. Students will be introduced to both theoretical and applied econometrics so that by the end of this course, they can apply the formal theories they learn to analyse complex real-world problems. Students will also need to use an econometric software package, STATA, and different datasets in this course. This will enable them to learn and explore multiple estimation and forecasting techniques. Finally, the course also provides the base for more advanced optional courses in econometrics.

**ECO250 - History of Economic Thought**  
**Credits: 3**

This course aims to provide students with a historical perspective on the evolution of economic theories, the contexts in which they emerged, and their influence on contemporary economic thought and policy. We will examine the contributions of prominent economists and explore how their ideas have shaped modern economic theory. The course presents economics as a multi-dimensional discipline, showing how different schools of thought have debated, competed, and influenced the evolution of ideas. We will also study the key historical milestones such as the Industrial Revolution, the Great Depression, and the Great Recession, which shaped economic thinking. While the primary focus will be on Western economic thought, the course will also include important contributions from Indian economic thought.

**ECO280 - Indian Economy: Performance and Policies**  
**Credits: 3**

The course introduces students to critical aspects of India's economic performance across all the

sectors and over a period of time. It discusses the economic and sectoral growth trajectory of India in the context of various policy announcements. The course shall bring in critical analysis of policies such as economic reforms announcement of 1991, agriculture policies, industrial policies, policy for service sector and trade, policies related to population, employment and poverty etc. The course will also bring the debate around the economic reform package announced during Covid 19. The course shall access the Indian economy data sets for the discussion.

### **ECO300 - Models of Political Economy**

**Credits: 3**

This course attempts to find answers of questions like what determines the size and target beneficiaries of public goods, welfare programs, taxation policies, effect of corrupt public officials, politician-industrialist nexus, electoral-cycles on economic policies. The course takes a positivist approach of explaining economic policymaking, assuming all agents are rational and behave strategically, focusing on various kinds of incentives and constraints the policy-makers face under different political systems. The course will cover topics like Probabilistic Voting, Median Voter's Theorem, Downsian Model of Electoral Competition, politics of redistribution over pensions and unemployment insurance, politics of special interest over local public goods and lobbying, separation of power through political institutions, presidential versus parliamentary political regimes etc.

### **ECO321 - Empirical Research Methods In Economics**

**Credits: 3**

Does university policy on minimum class

attendance improve student performance? Does girl education increase their marriage age and reduce fertility? Do new bank branches in villages increase women's entrepreneurship? Does a petrol price hike reduce private transportation usage? Such cause-and-effect questions on "Does X cause Y, or is X just correlated with Y?" are very relevant and come up in discussions in our day-to-day lives. However, the appropriate answer to such questions is very policy-relevant. Therefore, it requires a good understanding of the difference between correlation and causality and the methods that help differentiate between the two ideas. This course is essentially about learning how to find appropriate answers to the above questions. In this course, students will learn the counterfactual model of causality, enabling them to identify the causal mechanisms that influence the relationship between two variables. For most of the course, students will receive an intuitive and theoretical understanding of the applied (microeconomic) research methods, followed by their applications through research papers and their practice in STATA. At the end of this course, students should be able to apply these methods to their research ideas and the corresponding data from any particular field of interest (development, education, health, labour, environment, finance, management, etc.).

### **ECO500 - Economics For Managers**

**Credits: 3**

This course provides an overview of economic tools and analytical approaches that form the core economic toolkit for a manager to make informed business decisions. Topics covered include, inter alia, demand analysis, production and cost analysis, pricing, asymmetric information, aggregate variables, and macroeconomic policy. The economic tools and concepts

developed in this course are indispensable for managerial decisions in a data driven business environment. This is a core course for MBA students and aims to prepare them to take advanced courses in other management disciplines.

### **ECO501 - Intermediate Microeconomics**

**Credits: 3**

This is the first course in the Microeconomic Theory sequence covering consumer theory, producer theory and general equilibrium.

### **ECO504 - Industrial Organisation**

**Credits: 3**

Industrial organization is the study of market structures, the interaction between firms and factors external to firms which shape outcomes such as prices, quantities, number of firms and the market power yielded by each. IO also covers issues of how businesses/firms can respond to industrial features, and whether sometimes those responses become anti-competitive.

### **ECO507 - Models of Political Economy**

**Credits: 3**

• Do markets work perfectly in the real world? • When do markets fail? What happens when markets fail? • Can markets exist without Government intervention in the real world? • Economics is largely about Government Policy- Welfare, Tax, Redistribution etc. • The core question prevails- who gets what, and how much? • All economic theories contain political value judgement. This course attempts to explain economic policies in modern democracies, exploring the interface of economics and political science. The course aims to introduce

contemporary tools of economic policy making to expose the students to the current literature of formal economic modeling. This course attempts to find answers of questions like what determines the size and target beneficiaries of public goods, welfare programs, taxation policies, effect of corrupt public officials, politician-industrialist nexus, electoral-cycles on economic policies. The course takes a positivist approach of explaining economic policymaking, assuming all agents are rational and behave strategically, focusing on various kinds of incentives and constraints the policy-makers face under different political systems.

### **ECO510 - Environmental and Resource Economics**

**Credits: 3**

**\*\*COURSE CAN BE TAKEN BY MASTER'S STUDENTS IF THEY HAVE TAKEN MATHS COURSE(S) EQUIVALENT TO PREREQUISITES. INTERESTED STUDENTS SHOULD KINDLY MEET COURSE INSTRUCTOR AND/OR PROGRAMME CHAIR\*\*** This course would deal with how economic rationale can be applied to problems regarding the environment. Two prominent issues would be use of open-access natural resources (where property rights are not well defined) and environmental public good provision. Apart from coming up with instruments to deal with these problems, the course would also discuss about market failures related to pollution. The study of the concepts and techniques of environmental valuation would be important. Topics covered would include those related to development and sustainability: the degree of substitutability between natural resources and produced forms of capital (namely physical and human) and limits to growth implied by it. Since economic growth of

developing nations often involves rising pollution, the course would also spend some time on discussing the Environmental Kuznets Curve (EKC). The course concludes with “greening” the system of national accounts and attempts to include value of environmental services within the national product of countries (including the case for India). The course would be based on rigorous theory, readings of texts and articles and numerical examples.

### **ECO511 - Intermediate Macroeconomics**

**Credits: 3**

This is an introductory graduate-level course on macroeconomics designed for MS in economics students. Primarily, it will focus on theoretical building blocks of macroeconomics. For this, it aims to develop a rigorous understanding of the key foundational concepts and topics necessary to understand an economy as a whole over different time horizons viz. short-run, medium-run, and long-run. In the short-run, we will study the goods and money market and how they interact to determine the aggregate demand in an economy. Further, we will see how fiscal and monetary policy can affect aggregate demand and its various components. In the medium-run, we will study the labor market and link inflation with unemployment via the Phillips curve. We will also look at the effect of various economic shocks and policy decisions on the economy in both the short-run and medium-run via the IS-LM-PC model. After this, the course turns more mathematical in nature as we study the long-run aspects of an economy using various mathematical macro-models. Herein, we start the discussion on economic growth with the classical Solow Growth Model followed by neo-classical Ramsey growth model. Then, we will briefly talk about endogenous growth models and cover the basic

AK model and some of its extensions. Throughout the course, we will use simple mathematical equations and graphs to represent various states of the economy. Though it will turn more mathematical in the second-half but the focus will be more on intuition in terms of understanding the underlying behavior which results in those representations. For this purpose, we will study various markets that operate in any economy, viz., goods, money, capital, and labor markets. And, look at their interdependencies using a narrative-based approach wherein concepts will be revisited as and when required in order to complete the understanding loop. Note that this course is targeted at the MS economics students so the teaching will be more quantitative than any UG level macro course. Please keep this in mind before opting for this course. It is not recommended to be taken by UG students for the sake of completing their credits.

### **ECO544 - Urban Informal Economy**

**Credits: 1.5**

This is a policy oriented course that aims to provide an overview of theoretical debates and empirical evidence on the urban informal economy. It emphasizes policy and programmatic responses to the informal economy. The informal (unorganized) economy contributes about 60 percent of GDP and employs about 92 percent of the workforce (including agriculture). Small enterprises and labour are struggling to remain afloat and competitive in the current context of globalization and the pandemic crisis. The course is designed to provide an understanding of the informal economy and its various segments. An exposure to the nature of difficulties faced in doing business by enterprises in the sector would help analyze available policy options. The course will focus on identifying problems and finding

solutions to issues based on field work and secondary data.

### **ECO550 - History of Economic Thought** **Credits: 3**

This course aims to provide students with a historical perspective on the evolution of economic theories, the contexts in which they emerged, and their influence on contemporary economic thought and policy. We will examine the contributions of prominent economists and explore how their ideas have shaped modern economic theory. The course presents economics as a multi-dimensional discipline, showing how different schools of thought have debated, competed, and influenced the evolution of ideas. We will also study the key historical milestones such as the Industrial Revolution, the Great Depression, and the Great Recession, which shaped economic thinking. While the primary focus will be on Western economic thought, the course will also include important contributions from Indian economic thought.

### **ECO620 - Empirical Research Methods in Economics** **Credits: 3**

Does university policy on minimum class attendance improve student performance? Does girl education increase their marriage age and reduce fertility? Do new bank branches in villages increase women's entrepreneurship? Does a petrol price hike reduce private transportation usage? Such cause-and-effect questions on "Does X cause Y, or is X just correlated with Y?" are very relevant and come up in discussions in our day-to-day lives. However, the appropriate answer to such questions is very policy-relevant. Therefore, it requires a good understanding of the difference

between correlation and causality and the methods that help differentiate between the two ideas. This course is essentially about learning how to find appropriate answers to the above questions. In this course, students will learn the counterfactual model of causality, enabling them to identify the causal mechanisms that influence the relationship between two variables. For most of the course, students will receive an intuitive and theoretical understanding of the applied (microeconomic) research methods, followed by their applications through research papers and their practice in STATA. At the end of this course, students should be able to apply these methods to their research ideas and the corresponding data from any particular field of interest (development, education, health, labour, environment, finance, management, etc.).

### **ENV501 - Environment and Sustainability** **Credits: 1**

The course answers the following questions: How do issues of environment and sustainability impact firms? How do firms and their activities impact sustainability? The course covers three themes drawing high attention from the governments as well as other stakeholders including civil society and businesses. Conventionally the three themes; energy, environment and sustainability; are perceived through the lens of trade-offs. This perspective is changing in recent times. Policymakers, professionals and civil society actors are cooperating to align strategies and actions across themes to overcome societal and individual risks and to gain co-benefits and comparative advantage. In many environmentally proactive entities, "sustainability" is a core issue that is increasingly integrated with organizational processes, systems and strategies. Delineation of

policies to align energy, environment and sustainability is a highly explored subject drawing interest from researchers and practitioners. The course is divided into four modules which combine distinct yet inter-related concepts around the three central themes. The sessions cover the landscape ranging from global, national to local, spanning technologies, management and concepts from social sciences and ecology.

### **ENV502 - Sustainable Development Goals** **Credits: 3**

This is an interdisciplinary course focusing broadly on the seventeen dimensions of the UN Sustainable Development Goals (SDGs). Each session will focus on a thematic area and discuss the drivers of change, solutions and enabling factors using global case studies. The course will give the student broad knowledge of core concepts and take a deeper dive into the goals and indicators related to global societal challenges; climate change and energy transition; land and water resources and biodiversity protection. Students will gain an understanding of the processes of sustainable development through interdisciplinary engagement with concrete problems. Solutions at the country level, by the private sector and community and individual action will be covered

### **ENV591 - Sustainability and Circular Economy** **Credits: 1.5**

The course discusses the core concepts of sustainability. Beginning from the scientific definition of sustainability, the course gives exposure to substitution possibilities in human consumption behaviour and production decisions of firms towards more sustainable choices. The

course also studies country level data to see if higher per capita incomes are associated with sustainable choices and better waste management. The course dives into what is a circular economy and how it is related to waste management. From generating energy from waste, incineration to recycling and less dependence on virgin materials, the course studies rules and regulations set by the government with regards to waste management and circular economy. Having taken any principles level economics course would be advantageous for taking this course. Basic understanding of concepts such as consumer behaviour, production decisions of firms and how are they related to the aggregate economy would be needed for this course. For any student at the level of MA in Economics or MBA, this course would be useful in that issues of behavioural economics and energy conservation, how the Environmental Kuznets Curve (EKC) varies with waste generation and recovery and per capita incomes, business opportunities out of waste recovery from landfills and recycling waste would be covered. These topics are essential towards sustainable choices, sustainability and building a circular economy.

### **ETH201 - Ethics**

**Credits: 3**

Ethics, as an area of philosophical inquiry, deals with the question of how we ought to act in any given situation. In this introductory course, we will explore a set of influential contemporary moral theories, and learn how these can be applied to some of the most pressing moral issues of our time. We will address some aspects of the following questions. Is there a criterion for distinguishing between right and wrong? Are morals culturally relative? What is the best human life? What might be the moral bases for accepting

or rejecting practices like euthanasia, abortion, affirmative action, and civil disobedience? To what extent are we obligated to assist people in need? How ought we to treat animals? What might an ethical relationship between nations look like? Finally, we will discuss a subset of key ethical issues relating to the fields of engineering, business, and bioethics.

### **FAC104 - Tally ERP 9.0**

**Credits: 2**

Tally ERP 9.0 is an elementary level hands on practical training course which equips the students with necessary skills to operate a computerized accounting package. This course covers important features of financial accounting such as voucher entries of various accounting transactions to finalization of accounts, preparing Profit & Loss Account and Balance-sheet as per Schedule – VI, introduce to them basics of inventory management, Budgets and some of the widely used basic Taxation features such as TDS and recently introduced Goods and Service Tax.

### **FAC112 - Corporate Accounting**

**Credits: 3**

This course in Corporate Accounting, is an advanced level course which deals with complex accounting transactions for business operations. The focus of the course is the accounting procedures used to prepare two mandatory financial statements: Income Statement and Balance Sheet as per Companies Act 2013 and rationale behind preparation of Revenue Accounts of General Insurance Companies as per IRDA Act besides the financial statements. The course builds up a strong foundation for the other core accounting courses based on the pure accounting concepts. It is one of the pre requisites of

Advanced Corporate Accounting courses as it includes the formats and Notes to Accounts as per schedule III of the companies. It also encompasses the practical aspects of statement of changes in Equity, consolidated and stand alone statements. It encompasses the valuation of important components of companies' balance sheet; goodwill and shares. This course introduces students to the corporate accounting and the external financial reporting environment. The focus throughout the course is on the preparation of financial statements for public listed & Insurance companies and valuation of important items like Investments, Goodwill and shares.

### **FAC114 - Financial Accounting**

**Credits: 3**

This course is an introduction to the basic concepts and standards underlying the financial accounting systems. It aims to build upon the important accounting concepts and principles including revenue recognition, inventory, depreciation, and understanding the accounting equation. The course focuses initially on how to record economic events in the accounting records (i.e., bookkeeping and accrual accounting) and how to prepare and interpret the primary financial statements that summarize a firm's economic transactions (i.e., the balance sheet, the income statement, and the statement of cash flows). The course adopts a decision-maker perspective of accounting by emphasizing the relation between accounting data and the underlying economic events that generated them thereby enabling the students to read, understand and analyse financial statements through ratio analysis. The course also explores the areas of financial shenanigans wherein the students will be able to learn how companies use financial statements to disguise economic reality.

### **FAC121 - Direct Taxes**

**Credits: 3**

Direct taxes have gained significant importance in the Indian economy as it constitutes a major source of revenue to the Government. The course aims to provide an understanding on the Taxation System in India in general and Direct Taxes in specific. The course is designed to help the students acquaint themselves with the basic knowledge and practical application of the principles and provisions Income-tax Act, 1961. It introduces fundamental concepts under the Act like Previous Year, Assessment Year, Income, Person, Assessee and Residential Status. It includes understanding the Basis of Charge under various Heads of Income- Salary, House property, Capital Gains and Income From Other Sources under the Act and Computation of Total Income of an individual under the provisions of the Act. The course is largely designed to develop a foundation for the students about the importance of studying Income Tax by developing their awareness about the personal income tax aspects of an individual.

### **FAC124 - Fundamentals of GST**

**Credits: 1.5**

GST is one of the biggest policy reforms in post-independent India. It is set to change the method of doing business in India. The GST is set to redefine the political, economic, and commercial policies of India. The course aims to give the insight of GST to the students. The course provides an eliminatory understanding of the law and how it is going to affect the lives of the common man. It also discusses how GST leads to the formalization of Business in India. GST also has an important role in curbing parallel economy

in our country. A special focus is made on the impact of GST on SME Sectors, who constitute the backbone of our economy. The impact of GST plays a very important role in decision making. The production, marketing, and financial decision-making process has changed considerably post GST. The Course attempts to brief students about the various aspects of GST which has to be considered during decision making. The course will also highlight how GST has played a role in reducing red-tapism and corruption in India. It highlights the benefit of GST for improving the ease of doing business in India.

### **FAC125 - Business Taxation**

**Credits: 1.5**

This course is an extension of the course FAC121 Direct Taxes. Having studied the fundamental concepts under Direct Taxes, including the taxation of an individual earning incomes from employment, owning properties, sale of capital assets and other sources, this course aims to focus on the income of an individual from Business or Profession. It specifically includes the understanding of tax laws relating to determination of business or professional income of an individual and the deductions and disallowances applicable in determining the taxable business income of an individual. The course also aims to create an awareness of the tax benefits provided under the Income Tax Act through the deductions available to an individual based on various investments and payments made through the incomes earned, as well as through the application of the principles and rules of set off and carry forward of losses occurred under various heads of income. Another interesting aspect of this course would be to explore the situations under which the income of other

persons is included in the total income of an individual commonly known as the 'Clubbing Provisions' of the Act. Lastly, the course also aims at understanding the income structure of an individual involving various sources of income and computing his total income liable for tax under the Act.

### **FAC133 - Financial Management**

**Credits: 3**

This is an introductory course in finance. It provides an overview of some of the basic principles and theoretical framework leading to sound financial management decisions. The course provides an introduction to the application of finance in one's life and also the financial manager's role in achieving the optimal financial position of the firm. The course aims to provide students with a basic understanding of some of the tools and techniques used in financial decision making. It introduces the students to the utility of finance, its importance and relationships with other fields. It introduces the key concepts of Time Value Of Money and then goes on to illustrate the application of those concepts to various decisions of savings, investment, determining growth rates, determining present and future values, etc., which help to take more efficient savings and investment decisions. The course introduces students to the various techniques of Capital Budgeting for enabling sound decision-making for undertaking long-gestation capital projects. The course introduces the students to the various sources of long-term capital used for financing the firm and attempts to sensitize the students to the strategic and cost considerations to be considered while planning to raise funds from a particular source. The course also introduces the concepts of cost of capital, both for specific sources like bonds, preference shares, equity, retained

earnings and the overall cost of capital. The course introduces the students to the concepts of working capital and how to estimate needs of working capital.

**FAC215 - Cost & Management Accounting**  
**Credits: 3**

The course aims to acquaint students with basic cost accounting concepts and techniques, emphasizing the importance of management accounting in the decision-making process. It will familiarize students with cost ascertainment and the challenges associated with calculating costs. The course also focuses on the use and implications of cost-volume-profit analysis, break-even analysis, and types of variances. Furthermore, it aims to equip students with the skills to apply accounting and costing techniques to prepare various budgets and make informed decisions.

**FAC225 - Corporate Governance & Sustainability**  
**Credits: 3**

Corporate governance has gained significant importance following numerous corporate frauds in India and across the globe, including Satyam, Enron, and WorldCom, among others. This course aims to provide an in-depth understanding of the principles and procedures of corporate governance. It will expose students to the governance roles of various stakeholders, such as the board of directors, auditors, managers, promoters, and institutional investors, as well as different processes employed to promote effective corporate governance. In addition to Governance (G), this course also delves into the Environmental (E) and Social (S) aspects of sustainability. It provides a comprehensive

understanding of ESG concepts and practices, elucidating how they influence an organization's long-term performance.

**FAC241 - Banking**  
**Credits: 3**

Banking is considered as the lifeline of any modern economy. It is the core financial service, and plays a vital role in the success / failure of an economy. A large number of changes have happened globally as well as in Indian economy that have forced banks to change the ways they do their business. Since the course participants do not have any formal background of financial services and especially banking, the course aims to provide them with a learning opportunity to build foundation level understanding of the financial system and specifically the banking sector.

**FAC244 - Financial Markets**  
**Credits: 3**

This is a specialisation course which builds upon the financial knowledge that students obtained in earlier courses on Financial Management. It aims to provide the students an introduction to various financial markets like: capital, money and foreign exchange, which the student may be required to access as an individual or as part of an organisation. It introduces the students to the utility of these markets, the products available in these markets for investing and the role of the various market participants.

**FAC311 - Analysing Corporate Annual Report**  
**Credits: 3**

An annual report is a powerful and revealing document about a company's financial standing. To a trained professional it gives a substantial

insight into where a company may be headed in the future. However, to an untrained eye the annual report may seem like walls of accounting technicalities provided to fill space between the glossy photos and the upbeat messages from the CEO. In many aspects, reading an annual report could be a daunting task as it is a mixture of factual financial results and public relation information. There is a wide communication gap between the world of compliance and disclosure. It is difficult to interpret and understand the information provided in slick expensively produced annual reports. There can be no better piece of information about a company than annual reports but it is essential to cut through the marketing clutter in annual reports and extract vital information (financial content) that shows true picture of the company. This enable course will take the students through an intellectual tour of an annual report of the companies. It is designed and meant to develop skills to translate and read between the lines of the published financial statements and Notes to Accounts. It enhances the skill to sense the bigger picture behind the reporting of a company. The part of the course covers tools of financial analysis, including methods of evaluating accounting quality and corporate performance. The course shall address multiple issues pertaining to components of the Annual report like Management Discussion and Analysis (MDA), Directors Report (DR), Financial Highlights and Corporate Governance of the Companies. Through real world examples of listed/unlisted companies and projects, the course focuses on reading the annual reports with the thorough understanding of all the components essential for understanding the working of the company, its peers, economic environment, marketing aspects, growth trajectory, vision and analysis of the management, Auditors' Remarks and the human resource and ethics as a part of

corporate Governance. Students will learn to make better use of annual reports focusing on key issues, raising pertinent questions, and enhancing their understanding of the overall profile of the companies they are assessing.

### **FAC331 - Corporate Finance**

**Credits: 3**

This course introduces students to the basic concepts and methods that financial managers use to make effective investing and financing decisions, and explore the ways in which value is created and measured. The course lays emphasis on specific finance concepts vis-e-vie the risk and return relation, capital budgeting decision-analysis tools, dividend policy, and an overview of Leasing.

### **FAC336 - Working Capital Strategy**

**Credits: 1.5**

The effective management of a firm's financial resources is paramount to its survival, growth, and long-term value creation. This course provides an in-depth understanding of the principles and practices of capital strategy and working capital management. Students will learn how businesses make decisions regarding their long-term investments, financing mix, and the efficient management of short-term assets and liabilities. The course emphasizes practical application through case studies, problem-solving, and real-world examples where possible, building upon foundational knowledge in accounting and finance.

### **FAC512 - Financial Accounting**

**Credits: 1.5**

Financial accounting is the language of business.

It is the means by which an enterprise's financial situation is reported and communicated. The course focuses on the integration of accounting framework and business analysis in the forecasts of financial statements, which means applying accounting framework in analyzing business activities and the predictions of full sets of financial statements. The course deals with understanding the framework of the Financial Statements of the Companies and its Analysis. The course will enhance students' knowledge from recording entries to actual reporting. The course focuses on the fact that how key business transactions are accounted for, and how these transactions appear in the financial statements. The course will help the students to better understand the meaning of financial statement information and how to use financial statement data for analysis. The course forges a unique path in financial statement analysis through Commonsize statement Analysis and ratio analysis technique. The students shall understand the real life reporting of manufacturing and service companies through a project on Annual report of Nifty fifty companies

### **FAC513 - Management Accounting**

**Credits: 1.5**

This course covers the strategic nature of management accounting and the relevance of accounting information for today's competitive business environment. Emphasis is placed on the provision of accounting information for planning, control and decision making, and the application of accounting information for supporting tactical objectives and strategic missions of organizations. The first part of the course focuses on fundamental cost concepts, understanding cost measurement and cost allocation for product manufacturing and service organizations

including techniques of activity based costing. The second part emphasizes on developing the foundation for managerial decision making by exploring concepts of cost-volume-profit analysis, relevant cost analysis and its impact on the functioning of an organization. The third part of the course brings in aspects of strategic planning and operations control by focusing on the relevance of budgeting, variance analysis and strategic profitability analysis. Finally, the course aims to link theories to practice in management accounting by providing students with real life scenarios to integrate knowledge and promote skills in critical thinking and decision making.

### **FAC533 - Corporate Investments and Value Creation**

**Credits: 3**

The central purpose behind this course is to acclimatize students to basics of corporate investments and value creation. To be specific, as part of this course, students would work towards garnering competency in applying time value of money techniques to arrive at valuation in different contexts, such as personal investments, valuation of financial instruments, and assessing viability of firm-level investments. Further, students would be introduced to different drivers of firm value. In doing so, students would be exposed to aspects such as capital budgeting, capital structure and working capital management. While the course per se would help the student navigate the different strands of financial management both at an individual level as well as at the firm level, such navigations are not only meant to build competency in individual strands, but also to help students attain an integrated perspective -one that is anchored on value creation.

### **FAC534 - Strategic Corporate Finance**

**Credits: 3**

The course Strategic Corporate Finance primarily deals with many aspects of real-world treasury functions of a CFO. It takes into consideration managing both sides of the balance sheet in order to measure value-based performance of the corporation. The board members along with senior operating executives make strategic decisions which have a bearing on investments and financing. The CFO connects with all of them to improve shareholder value. Almost all aspects of management decisions are quantitatively and qualitatively analyzed from financial management angle.

### **FAC611 - Financial Analysis**

**Credits: 3**

A career in Finance often requires a deep understanding of company transactions and their impact on financials. This is an advanced level course that offers a deep dive into financial statement analysis with a focus on major corporate transactions, such as stock buybacks, stock splits, ESOPs, dividends, M&A, and their impact on Earnings Per Share (EPS) and key financial metrics. The course also covers sustainable earnings analysis through non-recurring items, discontinued operations, impairments, along with comprehensive analysis of the statement of changes in equity and shareholding patterns. These are probable areas for possible manipulations and analysts need to identify the same and integrate it in the decision making while going through the financial statements and ratios. Thus, course offers a full financial statements analysis from investment perspective by including all the above concepts and advanced analysis through signs of cash flows, earnings quality, free

cash flows, Du Pont analysis, CCC cycles, EVA Analysis, Altman Z score and F score. It will bridge the gap between theory and practice as students will also be able to identify industries based on their margins and sector specific characteristics. The course is rigorous as it includes lot of conceptual understanding and application and analysis of the same. The course is specially designed for financial analysts enthusiasts.

### **FAC630 - Behavioural Finance**

**Credits: 3**

Behavioural finance is the study of how psychology influences financial decision-making. It challenges the traditional view in finance that investors are rational actors who make decisions based on logic and perfect information. Instead, behavioural finance suggests that investors are emotional beings who are susceptible to cognitive biases, which can lead to suboptimal financial decisions. This course aims to help students develop understanding of the current topics of 'behavioural finance'. It provides an interpretative lens on a huge and growing literature. The course denotes the study of finance based on credible assumptions about how people behave, often confirmed by psychological experiments. The course will create a link between finance theory and practice to human behaviour. It will build upon the established principles of corporate finance before moving into psychological principles of behavioural finance, including heuristics and biases, overconfidence, emotion and social forces. The students will learn how human behaviour influences the decisions of individual investors and professional finance practitioners, managers, and markets.

### **FAC633 - Security Analysis and Portfolio**

### **Management**

**Credits: 3**

This course offers an introduction to the study of investments in a portfolio context. In doing so, it exposes students to the breadth of investment alternatives and portfolio construction to meet certain investment objectives. Different individuals or institutions will have differing investment objectives. The course will start with a discussion of the ways in which objectives vary, and the resulting portfolio implications. After a brief review of the various markets and their structures we will turn to one of the cornerstones of modern finance - "Modern Portfolio Theory". This is an emphasis on the importance of constructing optimal portfolios, in which diversification is used to achieve a target objective. It holds that capital should be allocated among the major asset groups in order to arrive at a balance of risk and return that matches the circumstances and objectives of the investor. Only after this allocation does individual security selection come into play. We will then go to a review of asset pricing theory, with a brief stop at equity valuation, and bond mathematics. In doing so, students would be exposed to different methods of valuation namely DCF, Relative Valuation and Economic Value Added in the context of deriving the intrinsic value of a share. This is followed by an overview of equity and bond portfolio management strategies and a review of prevailing portfolio performance measures. The course concludes with the question of performance evaluation - how do we measure success as compared to the original objectives? While a predominant proportion of the course contents fall within the contours of "Efficient Market Hypothesis (EMH)", the course also acclimatizes students on the trajectory of discourse on market efficiency – EMH to

Behavioral Finance to Adaptive Market Hypothesis (AMH).

### **FAC634 - International Finance**

**Credits: 3**

As the Indian economy integrates with the world economy, and businesses become more globalized, the significance of international finance is bound to increase in future. This course will introduce students to the global capital and foreign exchange markets as well as financial decision making of multinational firms. Topics to be discussed will include the global financial markets, why foreign exchange risk arises and the main hedging techniques, evaluation and complexities of foreign investment projects, Euromarkets, global sources of financing and the issues related to the cost of capital and financial structure in MNCs, working capital management and financing of international trade as well as certain aspects of international banking, international taxation and transfer pricing.

### **FAC635 - Financial Modelling**

**Credits: 3**

Financial modelling forms a part of the essential skill-set required by modern finance and business professionals to succeed in their careers. Most financial decisions, ranging from simple DCF calculations to financial analysis for mergers and acquisitions, require managers to quickly and accurately process large financial data for decision making. Today's financial models have gone far beyond the single-sheet spreadsheets and involve the use of advanced decision making and analysis tools. Proficiency in building financial models would place a powerful skill in the hands of students to effectively compete and succeed in the financial world.

### **FAC644 - Fintech Ventures**

**Credits: 3**

Technology is playing an increasingly dominant role in the financial service industry. It changes how existing players operate and creates new ways to deliver core services like payments, saving, investing, borrowing, and insuring. The Course provides an overview of technological advances radically changing the industry, focusing on AI/ML and Blockchain. The students will learn to analyze how these computing technologies reduce transaction costs, provide asymmetric information, and provide network effects in the competitive financial marketplace. The Course integrates a strategic discussion of Fintech ventures' competitive landscape and market opportunities, with an in-depth understanding of the technological foundations behind the business model and their use cases.

### **FBE101 - Introduction to Entrepreneurship**

**Credits: 1.5**

This is an undergraduate level course intended to create awareness about basic entrepreneurial skills. It is for an audience that plans to be involved in new-venture creation or take the existing venture further, be it a small business, family business or a turnaround. The focus will be on the formulation and implementation issues that relate to conceptualizing and developing ventures. It is meant to expose the audience to the world of entrepreneurship and trigger entrepreneurial interest. In this way the course will try to achieve twin purposes: generating entrepreneurial interest and to motivate participants to become informed entrepreneurs.

### **FBE502 - Design Thinking**

**Credits: 1.5**

Design and design thinking are aimed at one primary goal above everything else – improvement of the quality of life. Design is a set of activities and processes to bring about this improvement and beneficial change on their own. Design Thinking is a set of activities and processes to let design happen on its own. It is aimed at making designerly behaviour a very core mindset and bodyset. Design Thinking in the modern context is recognised as a core business activity which is capable of enhancing all activities around it, making them better and more human and consequently profitable as well. Over the years, it has developed as a very robust and ever-evolving combination of design, science, human behaviour and business principles. At the centre of this is the target user for whom systems are built to understand them, empathise with them define their problems and help them solve these problems through strategically targeted design interventions. Ultimately, all business is about the people who invest in it through one or the other level of consumer behaviour. Design Thinking is aimed at giving business thinkers, a very deeply strategic advantage in the market. The proposed course is an introduction to Design Thinking which is delivered through a set of 14 sessions, discussions, and structured assignments that help internalise these basic concepts. Several minor assignments and a major project serve as a vehicle for participative action that is central to the understanding of Design Thinking as applied to imaginative business models while understanding four key aspects – context, intent, recipients of the design and the system involved.

### **FBE508 - Intellectual Property Rights**

**Credits: 3**

Intellectual Property Right is an important part of organization strategy for organizations ranging from commercial companies to non-profits like education and research institutions. It is also important for individuals who create any original work, be it in the scientific, literary, or cultural domain. Intellectual property rights are considered monopolistic rights, but the monopoly is a limited one as the IPRs will go in the public domain after a certain stipulated time. The ethical implications of the IPRs will be discussed and deliberated during the course through various case studies where monopolistic presence versus the social benefits are in conflict especially pharmaceutical products and/or utilitarian goods. The course will familiarize students with the popular types of intellectual properties and the legal provisions related to them and the administrative remedies which can be sought for. With the advent of technology, intellectual property protection has become a challenge due to piracy. The course deals with the technological solutions to the sustainable inventions and whether they can be protected through IPRs or not. The course also looks into the contemporary issues of Intellectual Property rights in the global context. The course will also provide insight into the competitive and strategic advantages of enterprises by using Intellectual Property Rights.

### **FBE511 - Family Business Management and Policies**

**Credits: 1.5**

The predominance of Family Businesses in India is too obvious to bear re-iteration. Although internationally, Family Businesses have received attention from scholars, this area is still in its early days as far as India-specific research is concerned. This course focuses on various issues in Family Business Management, particularly in the Indian

context. Beginning with a broad overview of the Socio-historical context of business in India, it goes on to discuss characteristics of family businesses and their peculiarities. The issues discussed in the course are – special characteristics of Family Businesses, the role of professionals in family business, family & business governance, areas of conflict between generations and succession planning.

### **FBE512 - Succession Planning and Professionalization**

**Credits: 1.5**

The course is directed towards students who will enter into the management of family businesses, either their own family's or someone else's, and students who will do business with family firms, consult to them, mergers and acquisitions, etc. The focus is on small and mid-size firms. It is assumed that the students opting for this course will have some familiarity with the basic issues in Family Business Management. The course deals in some detail with the two most significant areas of concern in Family Business Management (for practitioners and academicians alike) i.e. Professionalising of Family Business and Succession Planning in Family Business.

### **FBE602 - New Venture Creation**

**Credits: 1.5**

This course provides a broad-based introduction to entrepreneurship. The course activities will include evaluating commercial potential of business ideas and opportunities, researching markets and competition, understanding the importance of patents and copyrights, developing a business plan, acquiring resources, avoiding pitfalls, and financing the start-up. Participants in the course will explore the mind-set,

considerations, realities, and real-world methods associated with the process of launching a new enterprise. Whether simply desiring to learn more about entrepreneurship or desiring to launch an enterprise, the course will provide know-how and tools to be more effective in the entrepreneurial process. This is a team-based course that will permit groups of students to develop portions of a business presentation piece-by-piece. Both team and individual assignments will be required. A team project focused on the creation of an investor overview for a new business opportunity (including backup slides equivalent to preparing most of a business plan) will comprise a major part of the course.

### **HRT511 - Heritage Discourses and Frameworks**

**Credits: 3**

Heritage is a broad concept that draws from various disciplinary discourses including anthropology, architecture, art, culture, development, ecology, environment, forestry, geography, history, natural resources, traditional arts and crafts, urban design and planning, wildlife and so on. However, a general perception of heritage usually refers only to the historic and monumental examples of heritage. Even within the monument-centric discourse, it is widely perceived that the objective of heritage conservation and management is to 'preserve' heritage as it is (the cult of the ruins) by using conservation and preservation as a technical process of ensuring the longevity of the ruins. However, it is widely accepted and followed today that the heritage discourse has evolved much broadly to account for change and continuity, the intangibles and more recently calls have been made to view heritage holistically. As opposed to the conservation / preservation

paradigm, an interdisciplinary management paradigm is evolving through discourses as well as frameworks of practice at different levels. This course provides an overview of both the conventional notions and the evolving concepts. Hence, it gives a critical foundation to heritage understanding and makes students aware of a range of global frameworks that have been influencing current heritage practices. This will be a foundational course to begin both for Masters as well as Doctoral students in heritage management.

**HRT512 - Conservation Principles and Processes**  
**Credits: 3**

This course provides an in-depth scientific foundation for the understanding, analysis, and preservation of cultural heritage materials. It introduces students to the physical and chemical principles that govern the deterioration and stabilisation of art objects, archaeological materials, architectural surfaces, and historic artefacts. Through a multidisciplinary lens combining chemistry, materials science, environmental studies, and conservation theory, the course explores how scientific methods are applied to diagnose condition, identify constituent materials, and design conservation interventions. The emphasis is placed on the ethical framework that guides decision-making in a cultural context, and collaboration between scientists, conservators, and heritage professionals. This course is essential for students interested in careers in heritage management, museums, conservation science and other heritage institutions.

**HRT531 - Cultural Resource Mapping & Documentation**

**Credits: 3**

This course provides an overview and approaches of documentation of various heritage resources, preparing inventories and archiving – starting from architectural and objects documentation to intangible cultural heritage resources documentation, and subsequently moves towards a systematic inventories and database of heritage elements and assets.

**HRT533 - Heritage and Business: Designing Heritage Experiences**  
**Credits: 1.5**

In an attempt to acquire a competitive advantage and maximise profit, companies seek ways to enhance customer loyalty. The most powerful tool to this end is the model of designing experiences. ‘Experience’, differentiated from ‘service’, is a personal, particularly strong connection, based on emotions and imprinted in memory, that the company develops with its customers. It is important to note that the model has proved successful even at periods of instability/crisis. The course presents the principles, methodologies and practical tools of the experience model, and applies it to a wide range of heritage organisations and sectors (such as cultural tourism, fashion/design/ traditional crafts, cultural events, educational programs and digital technology applications) with respect to heritage significance and values. In this context, the key challenges for heritage organisations are to incorporate the experience model in their: • strategy: customer experiences at the core of the business model, and not as an incidental byproduct • management: setting in place and linking management levels, people, and processes for the designing and offering of experiences • branding and marketing: creating a strong brand

centred on customer experience; and communicating the offering of experiences to the customers, through various advertising channels. A wide range of heritage organisations, international and Asian and Indian ones, are used as case studies. The ultimate aim of the course is to help current and potential managers design unique customised experiences, sustaining and expanding their organisations’ customer base and increasing customer loyalty. The course is open to students of diverse backgrounds and interests. The course is offered to both postgraduate and undergraduate students.

**HRT623 - Nature & Environment Conservation and Management**  
**Credits: 1.5**

This course will introduce students to the vast field of Natural Heritage Management, that includes ecological perspectives, environmental and biodiversity management.

**HRT634 - Arts, Culture and Heritage - A Managerial Economics Perspective**  
**Credits: 3**

Arts, Culture and Heritage have been approached from historical, legal, aesthetic and institutional perspectives. Exposure to these dimensions form the foundations of education in arts, culture and heritage and have the potential to create a corpus of scholarship and research prowess in the three realms. It is important that professional managers and policy makers are sensitive to the trends imposed by the new generation of digital technologies and economic instruments remains to be accomplished. However, the prevalent economics perspectives often miss out the untapped potential of arts, culture and heritage sectors. It is against the background of this felt

need that this course has been conceived. The goal of this Course is to explore applicable economics frameworks and provide insights on the management dimensions of arts, culture and heritage for graduate and Doctoral students who desire to specialise in arts, culture and heritage.

### **INS511 - Perspective on Market Research Sector**

**Credits: 1**

This elective course on the market research industry is intended to provide the participants an overview of this industry: its size, structure, growth, key players, segmentation, trends, challenges, and opportunities. The market research industry delivers forward-looking information and insights to help companies take effective marketing strategy decisions. Market research impacts all aspects of a client's business, across all industry sectors. Hence, an understanding of the market research industry will prepare future users and participants of the industry understand what drives this industry, what the constraints are, how the industry is evolving and how to maximise value when selling or using market research.

### **INS512 - Perspective on Real Estate Sector**

**Credits: 1**

Real estate sector is one of the largest industries in India in particular and the most globally recognized sectors in general. It is one of the biggest employers in the country. This sector includes housing, retail, hospitality and commercial. In terms of the market size in India, the industry is expected to grow from US\$ 120 billion in 2017 to US\$ 1 trillion by 2030. Moreover, the growing FDI in the sector and rapid urbanization will contribute significantly to the growth and expansion of the real estate industry.

Hence, an understanding of this industry is required for management students to explore the job opportunity in this sector. This course is designed to be a primer on the real estate sector in India. This course attempts to provide a glimpse of some relevant areas that need further attention both from the industry and the academic perspective.

### **INS514 - Perspective on Banking**

**Credits: 1**

Banking sector is the lifeline of any modern economy. It is one of the important financial pillars of the financial system, which plays a vital role in the success / failure of an economy. The banking sector is dominant in India as it accounts for more than 60 per cent of the assets of the financial sector. Banking had traditionally remained a protected industry in India. A series of reforms were undertaken based on the recommendations of the Narsimham Committee post 1991. A variety of developments have compelled banks to change the ways of doing business. This course attempts to provide a glimpse of some relevant areas that need further attention both from the industry and the academic perspective.

### **INS521 - Perspective on Energy Sector**

**Credits: 1**

Energy companies are among the fastest-growing companies, both in terms of revenue and profits. In India, five of the top fifteen companies are in the business of energy exploration, production and/or distribution. Apart from the conventional energy businesses, new avenues have also opened up in fields of alternative energy supply, smart grids and energy services. Energy businesses are facing unprecedented challenges. While the demand for

energy is on the rise, conventional fossil fuel stocks are uncertain and depleting, there is a global imperative to reduce the emissions of greenhouse gases. Since energy businesses often transcend national borders, they are exposed to global geopolitical, financial, and environmental market risks.

### **MGT105 - History of Indian Business**

**Credits: 3**

An orientation and curiosity of studying Indian and global business history Business history has an important role to play in developing and clarifying our understanding of the evolution of business – be it industries, individual companies, business families and groups amidst the social and economic environment in which it sustains. While quantitative methodologies and the need for big data drive research in Management studies, this course demonstrates how far business history is a truly global field, even while studying it from a national framework. To draw in-depth, fine-grained comparisons across different regions of the country, examining strategies of firms, states, and business associations, students stand to gain new perspectives into their own businesses while participating in current debates in adjacent fields such as political economy and global businesses. This course on the history of Indian Business is multidisciplinary in its nature, where history and business are conjointly examined as important tools for understanding human nature and its past endeavors, throwing light on the present and future in many ways for the young managers/entrepreneurs. By following a project based learning pedagogy, this course attempts at enabling students to understand history as contemporary, everyday lived experience.

### **MGT111 - Identity and Behaviour**

**Credits: 3**

This course begins with a discussion on how individual and group identities are created and maintained and in turn how it affects behavior. Several classical and neo-classical theories from the disciplines of psychology and social psychology would be discussed. The understanding of these concepts and theories would facilitate the understanding of groups and organisations in future courses. It would equip the students to develop people skills and enable them to deal with issues such as improving productivity, job satisfaction, motivation, learning etc. in organisations. The course would promote self-awareness and interpersonal awareness and students' ability to work in groups and in organizational settings. The course would focus on concepts which facilitate the understanding of the 'Self' and 'Identity' followed by its implication on human behaviour.

**MGT112 - Organisation Processes****Credits: 3**

This course is a spin-off to the Identity and Behaviour course taught in previous semesters. People working in organizations get affected not just by who they are, but also but who they are working with and aspects like their teams, leaders, organizational culture, change and communication. The course shifts away from the individual level to the group, and organizational levels of behavior drawing on concepts and practices from the field of Organizational Behavior (OB). This course provides a basic understanding of your own and others' behavior, particularly in teams. It enhances your ability to communicate and work effectively with others. Organization requires effective management of people and a clear understanding of human

behavior and social processes. Managers need to have a good understanding both of themselves and of those whom they will lead. The prior knowledge of individuals' perceptions, attitudes, and behavior will enable you to choose appropriate leadership styles and managerial practices to increase organization effectiveness and positive human outcomes.

**MGT121 - Human Capital Management****Credits: 3**

Success in today's competitive business environment is increasingly the function of effective management of its resources, particularly, employee. The quality of the organization's employees, their enthusiasm and satisfaction with their jobs, and their sense of fair treatment all impact the firm's productivity, level of customer service, reputation, and survival. The students of human resources management must aware of basic aspects of human resource management to understand the functioning of human resource management in an organizational setting. The challenges that might be associated with and the objectives of Human capital which they have to deal with when going through the new nature of organizational structures.

**MGT136 - Indian Legal System****Credits: 1.5**

Day-to-day living and Business operations have to be carried out within a country's legal framework. This premise requires a student to attain working knowledge about the legal systems and some laws which impact the everyday life. The course aims at meeting this requirement. The course begins with an introduction to the Indian Legal System, proceeds to discuss the important Rights of every Indian, and finally explains selected commercial

laws. The topics discussed throughout the course aim to ensure the personal and professional well-being of the students from the legal context. Students should expect to deal with quite a few court cases over the semester and in some cases present them in writing. Also, the students will be introduced to the new criminal laws which are being implemented since 1st July 2024. The course deals with practical insights through various factsheet, role play and the class discussions.

**MGT221 - Strategic Human Resource Management****Credits: 3**

Given globalization, the growing integration of the world economy in to one marketplace, corporations are subject to unprecedented levels of competition. The critical source of competitive advantage for these corporations is not their physical assets, but their people. It is people, not companies, who innovate, create new products, make decisions, develop and implement business plans, penetrate new markets, and serve clients and customers. While developing effective business strategy is important to organizational success, the capacity to implement any given business strategy is completely dependent on a corporation's people. The Strategic Human Resource Management module provides students with a critical understanding of the theories, principles, historical trends, current issues and practices relevant to human resource management strategy in organisations. This will support the development of subject specific and key transferable skills necessary for employment in roles which require the effective management of both human and knowledge capital within the organisation, therefore extending beyond purely human resource management roles. By exploring

the shifting of roles from process manager or administrator to strategic business advisor and partner, students will understand the unique strategic positioning of contemporary human resource management and the subsequent demands placed on resources working in this area

### **MGT223 - Industrial Relations and Employment Laws**

**Credits: 3**

Given globalization, the growing integration of the world economy in to one marketplace, corporations are subject to unprecedented levels of competition. The critical source of competitive advantage for these corporations is not their physical assets, but their people. It is people, not companies, who innovate, create new products, make decisions, develop and implement business plans, penetrate new markets, and serve clients and customers. Workplace issues have become one of the fastest-growing areas of state and federal law. Employment-related lawsuits filed in courts have tripled in volume in the past decade, and now account for a tenth of all civil cases. Many state courts have experienced a similar burgeoning of their employment law caseloads. This course examines this diverse, rewarding, and rapidly evolving area of legal side of employment by considering the diverse array of laws and institutions that regulate the employment relationship. The substantive focus of the course is on laws that affect employees in unionized and non-unionized settings, such as protections against dismissal without cause, wage and hour restrictions, workplace privacy, covenants not to compete, and mandatory arbitration of employment disputes and how it stand up in global scenario as well.

### **MGT234 - Civil & Property Laws**

**Credits: 3**

The basic understanding of Civil Litigation and its nuances is required for any citizen and professional who intend to carry out trade and business. Different property laws are applied to tangible and intangible properties and the first phase of this course deals with Intellectual Property Laws, Transfer of Property Laws and laws on Real Estate. How to execute the contracts, what can be the remedies available while executing these laws, and amicable resolution of the civil disputes is dealt in the second part of the course. The course is divided into two modules namely Property Laws and Civil Procedural Laws.

### **MGT239 - Legal and Ethical Aspects of Digital Technologies**

**Credits: 1.5**

The exponential growth in digital technologies and their widespread acceptance has elevated several Ethical and legal challenges which need careful deliberation. While these technologies promote innovation intending to improve ease of living, they create serious issues on privacy, governance and societal impact. Ethicists have raised concerns over how digital technologies violate the core values of human existence and sought active measures to protect them. Regulating agencies have been looking for ways to regulate these new technologies to protect core human values. The regulatory framework, however, has lagged considerably in regulating technological advancements resulting in a wide gap between the technology and regulatory upgrades. Consequently, there is a growing emphasis on self-regulation by the industry and voluntary codes that bridge the current gap. This

course looks at the Ethical and legal challenges posed by digital technologies, understands the existing regulatory framework and examines how self-regulation and soft law can help overcome the challenges. The course starts with an understanding of how digital technologies have raised ethical and legal concerns and why these concerns require immediate attention, particularly when the regulatory frameworks have not been able to keep up with the emergence of technology. In the next stage, the course looks at the existing regulatory framework for these digital technologies and how to strengthen these frameworks. The course concludes with an overview of recent regulatory developments in this direction, including the idea of self-regulation by industry and the emergence of Soft Law.

### **MGT328 - People Analytics**

**Credits: 3**

Human resource management is the process of gaining a competitive advantage through people. Organizational performance is driven by people, and it depends on certain measures. Human Resource (HR) experts need to be skilled at planning and interpreting organizations' people metrics. This requires a solid understanding of HR analytics, i.e., the systematic collection, analysis, and interpretation of data considered to improve decisions about talent and moreover the organization at large. The application of analytics is changing the way HR managers quantify the value that people (i.e., talent) - a company's biggest asset - have on the organization's ability to succeed in the market or in its mission. For enabling managers to make smart decisions about talent, HR needs to effectually leverage data. When equipped with metrics that are suitably designed and easy to interpret, HR can render managers with analytics to make decisions which

will not only improve operations nonetheless also create systemic advantages. Data and sophisticated analysis are brought in the dynamics to effectively handle people-related issues viz., recruiting, hiring and promotion, performance evaluation, leadership, collaboration, job design, and compensation. The curriculum is of an introductory nature to the theory of people analytics. It is not intended to prepare learners to perform complex talent management data analysis. At the conclusion of this course, you will be able to understand that how and when hard data is operated to make soft-skill decisions about hiring and talent development; therefore, you may level yourself as a strategic partner in the company's talent management decisions. The course will help students in three distinct ways. One, it will provide students with the latest grounding in current evidence on managing people, providing a knowledge base which shall ensure that their future management is led by the best practices. Second, develop the understanding and skills that are necessary to be thoughtful, critical consumers of data on people management, allowing them to make an in-depth analysis as they make people decisions. Third, provide direction and practice in conducting people analytics, preparing students to gather their own data, and making students more skilled analysts. These goals will be pursued through a mixture of case discussion, lecture, and hands-on exploration of a variety of data sets. The course is intended to introduce you to the fact that Organizations flourish when the people who work in them flourish. Analytics can help make both happen.

### **MGT341 - Competitive Strategy** **Credits: 1.5**

Organizations from inception are driven by organizational level objectives also known as

strategic goals of the organization. Strategies are designed to achieve these strategic goals and this planning is a prerogative only of the top-level managers. They have the knowledge of the business environment, both internal and external and are able to connect the activities of the various functions of the business to achieve organizational goals. This course aims to create an understanding of how organizational level goals are decided and how competitive strategies are formulated after conducting situational analysis.

### **MGT504 - Behavioural Lab I** **Credits: 0.75**

The area of behaviour is no more restricted solely to experimentation and to decode behaviour for work output. In these contemporary times, managers are challenging the accepted results of a traditional understanding of behaviours. The idea of how behaviour contributes at business, society, and technology levels is changing. The idea of behaviour lab is to deliver behaviour to look at businesses, areas, and domains affected by it. Addictive behaviour, Networks, Irrational decisions, Mapping behaviour online are the newer areas where behaviour's application has become more relevant. This also means developing skills to understand, analyse and apply behaviour in other areas that are not just restricted to Businesses. Thus, learning behaviour with a more interdisciplinary focus and having skills to understand and analyse them. Consequently, such skills facilitate a person to survive what waits for them in the professional world. Workplace challenges, often fuelled by a keen intuition, can now form the basis of experiments that allow us to understand the processes, decisions, communities and how they work in tandem to achieve or/ and survive changes. Behaviour Lab equips students with tools, methods and interventions aligned with

these changes and also help them later in their journey in the business world. Moreover, the course makes them aware of how the behaviour domain is contributing in areas that were untouched earlier.

### **MGT505 - Problem Solving for Social Change** **Credits: 1.5**

Ahmedabad University engages students' imagination with contemporary global problems through Project-based learning. The graduates of the management school are supposed to be socially conscious leaders with a problem-solving attitude. These graduates will play a crucial role in solving social problems through various institutions such as businesses, government and non-profits. Problem-solving for Social Change teaches skills, theories and strategies necessary for engaging management students with various social problems. The course will cover such issues as Problem-Solving Philanthropy and roles of non-profit organisations in solving social problems, outcome-oriented philanthropy, CEO-Activism. The course will also encourage students to discover whether giving to the poor is morally essential or optional. Students will work in groups to apply these concepts and tools to analyse their choice and interest problems.

### **MGT506 - Digital Thinking** **Credits: 1.5**

The pace at which digital technology is transforming the world is unprecedented. Digital technologies have removed traditional constraints and enabled new opportunities through a hyper-connected world. At the same time, customers have become more demanding, and the rate of disruption is accelerating. As a result, businesses today face both significant opportunities and

serious threats. For instance, Big Data and Artificial Intelligence have enhanced knowledge creation and decision-making, but they have also disrupted many established business models. This course explores how digital technologies can be leveraged to design more profitable business models, engage more deeply with customers, and improve operational effectiveness to stay competitive in today's environment. It also examines how organisations can adapt to and thrive amid rapid technological change. The course does not focus on mastering the technology behind emerging technologies. Rather, it focusses on how to apply these technologies strategically to create and sustain competitive advantage. It is relevant not only to technology firms, but also to businesses across all sectors seeking to succeed in today's connected world.

### **MGT509 - Business Models** **Credits: 1.5**

'Business-model' is a buzz word now in boardrooms, especially when the business encounters problems. The managers agree or disagree if the present business model is working any more or it needs navigation. To put it simply, a business model is both a short- and long-term framework of plans and moral rules within which a business operates. If the business model is strong it creates value and business prospers. Reverse happens when the business model is weak. Over a period of time, an existing business calibrates its business model in keeping with the surrounding changes to remain relevant otherwise it may perish. A carefully designed business model has an inherent strength but it may not be long lasting. Hence, calibration is necessary from time to time. A rightly calibrated business model can act as a game changer. Today's business models were imagined a decade ago and we have to create

tomorrow's business model considering many unknown bets. Therefore, formal education and intelligent hard work are necessary to create a winning business model. Even though there are some generic and popular business models developed by experts, the owners and managers can bypass the standard ones and create a differentiated business model most suited to their businesses. This course mainly deals with identifying and placing various business drivers in sequence and changing it whenever and wherever necessary in order to make competitive business models.

### **MGT511 - Organisational Behaviour** **Credits: 1.5**

Organisations are a combination of interactions, relationship and processes that are played out in various scenarios to make the organisation function efficiently. These interactions are not simple in nature and may lead to varied outcomes. Consequently, making an organization a system that is constantly evolving in terms of people, behaviour and its reaction to the systems. In the contemporary world, variables of data, technology, automation, shared economy, behaviour, people and interactions are the reason for any organisation to sustain and leap. Owing to ambidexterity in organisations and people, we see a drastic shift that organisations are going to work. The pandemic has acted as a catalyst for numerous changes in organisations. Thus, making it more critical and intricate to understand the interaction among people, behaviour and the organisations in which we work. The course will be an introduction to concepts that are going to be a part of students/ Managers organisational life. The students shall be able to test their understanding of the concepts that we introduce by examining Organisational life cycle and its various

components. This will involve understanding, reflecting and looking at processes that are part of the organisational life of individuals, members of a team or organisations. We shall focus on the following: • What is organisation for an individual? • Based on my life and experiences, how do I look at the idea of organisation. • As a manager/ Employee/ or entrepreneurs what will be my role in an organisation. The course is designed to introduce students to the ideas of Managing people in organisations. While going through the course, they will be able to understand, reflect, debate around the life of and life in organisations during the changing times. Each topic will be acting as the building blocks of organisations and life within them.

### **MGT513 - Leadership** **Credits: 3**

This course deals with Leadership. In the present context the idea of Leadership is changing. A leader is no longer a person with authority who can guide a group of people to a defined goal. The course will highlight the understanding of leadership in the context of influence as suggested by John Maxwell. A modern leader is authentic, leads by example, encourages, empowers, and nurtures people around her /him. S/he is empathetic towards needs of others, is humble and emotionally intelligent. This course aims to enable participants understand and develop leadership insights and competencies at self, group and organisational levels. At the theoretical level, the course aims to provide conceptual frameworks to understand various aspects of leadership at the said three levels. It would highlight the seminal works of John Maxwell, Kouzes and Posner, Richard Daft, Bill George, James Scouller, Ken Blanchard, Jim Collins and Robert Greenleaf among others. At the application level, the course

aims to provide necessary knowledge and skills required to develop a Leadership repertoire in personal and professional contexts through reflections, experiential learning and classroom discussions. The course would help participants to gain insights into Authentic Leadership and how one can become an effective leader by knowing one's self and people around us. The course will help students to bring in changes at a personal level through reflections and introspection and will help them understand their own values, skills, goals, leadership purpose, leadership readiness etc.

**MGT521 - People Practices and Decision Making**  
**Credits: 1.5**

“There are only three measurements that tell you nearly everything you need to know about your organisation's overall performance: employee engagement, customer satisfaction, and cash flow... It goes without saying that no company, small or large, can win over the long run without the right talent which believes in the mission and understands how to achieve it.” – Late Jack Welch, former CEO and chairman of General Electric To win the customers and shareholders, it is essential to first win the people within the organisation. This course on People Practices and Decision Making is an introduction to various people practices in organisations. It will enable participants to understand how these practices should be designed and implemented to provide a competitive advantage to the organization through its people. Further, the course aims to develop decision-making skills keeping in mind that both the organisation and its people grow together. The course introduces various practices and frameworks in talent acquisition, learning, and development, employee relations, health, and

safety, etc. The course places every participant in the shoes of a manager who makes decisions for their people with a motive to drive the organisation forward towards its mission. Each session integrates the concept of "Diversity and Inclusion" since it is a prerequisite for people-related practice and decisions.

**MGT522 - Strategic Human Resource Management**  
**Credits: 3**

Strategic Human Resource Management is the foundation of any organization which when well planned and executed aids the organization in creating a sustainable competitive advantage. This course examines the role of HRM in business viability and relative performance. It considers the potential of HRM to enhance organizational flexibility and help build human capital for overall organizational effectiveness. It examines HRM in dynamic and complex contexts and discusses practical ways of improving strategic HR planning in firms. The course begins with a recap HR concepts and theories discussed in the previous course MGT121 Human Capital Management. It will therefore highlight the HR practices in the light of various strategies taken at the organizational level, thereby bridging the gap between strategy and human resource management. It later moves on to encompass the various division of HR that are affected/change with the management's various decisions.

**MGT532 - Industrial Relations and Labour Laws**  
**Credits: 3**

In an era of changing business scenarios, human resources have emerged as an inalienable part of the business. From merely being a medium of

economic activity, human resources have emerged as an intrinsic stakeholder in the business. In a world of increasing regulatory requirements, efficient compliance of employment codes is the minimum that organizations must achieve. Premier organizations strive to strategize their human resource policies and man-power requirements in a way that not only ensures smooth compliance of employment laws but generates greater benefits for an internal stakeholder. This course discusses in detail the Labour Codes applicable in India. It starts by examining the constitutional aspects of labour laws. The course then moves on to discussing the four labour codes prevailing in India. In the concluding part, the course discusses the regulatory framework in different countries and highlights the role of global organizations like the International Labour Organization.

**MGT621 - Selection and Testing**  
**Credits: 1.5**

It requires more than mere instincts to hire the right candidate. Yet most managers solely use their instincts while making hiring decision. Given that poor hiring can be extremely costly on the part of management, it is essential for managers to appreciate the intricacies involved in hiring. This course is targeted towards honing up essential managerial skills for taking right kind of recruitment and selection decision.

**MGT623 - International HRM**  
**Credits: 1.5**

This course aims to develop the professional skills of future managers in the areas of international human resource management and cross-cultural management. This course provides an opportunity to students to explore international

dimensions of the core aspects of human resource management, such as linkage with international business strategy and structure, recruitment, compensation and reward management, training and development, performance management, and industrial relations.

### **MGT626 - Sustainable Human Resource Management**

**Credits: 1.5**

The course Sustainable HRM focuses on human resource functions in large companies in a globalized world from a sustainability perspective. The approach focuses on the role of HRM and leadership in contributing to corporate sustainability to achieve triple bottom-line or economic, social and environmental outcomes of sustainable development. This course is based on research and insights from diverse fields, including corporate sustainability and corporate social responsibility, strategic HRM, sustainable HRM, Green HRM, sustainable HRM measurements and reporting.

### **MGT628 - People Analytics**

**Credits: 3**

Human resource management is the process of gaining a competitive advantage through people. Organizational performance is driven by people, and it depends on certain measures. Human Resource (HR) experts need to be skilled at planning and interpreting organizations' people metrics. This requires a solid understanding of HR analytics, i.e., the systematic collection, analysis, and interpretation of data considered to improve decisions about talent and moreover the organization at large. The application of analytics is changing the way HR managers quantify the value that people (i.e., talent) - a company's

biggest asset - have on the organization's ability to succeed in the market or in its mission. For enabling managers to make smart decisions about talent, HR needs to effectually leverage data. When equipped with metrics that are suitably designed and easy to interpret, HR can render managers with analytics to make decisions which will not only improve operations nonetheless also create systemic advantages. Data and sophisticated analysis are brought in the dynamics to effectively handle people-related issues viz., recruiting, hiring and promotion, performance evaluation, leadership, collaboration, job design, and compensation. The curriculum is of an introductory nature to the theory of people analytics. It is not intended to prepare learners to perform complex talent management data analysis. At the conclusion of this course, you will be able to understand that how and when hard data is operated to make soft-skill decisions about hiring and talent development; therefore, you may level yourself as a strategic partner in the company's talent management decisions. The course will help students in three distinct ways. One, it will provide students with the latest grounding in current evidence on managing people, providing a knowledge base which shall ensure that their future management is led by the best practices. Second, develop the understanding and skills that are necessary to be thoughtful, critical consumers of data on people management, allowing them to make an in-depth analysis as they make people decisions. Third, provide direction and practice in conducting people analytics, preparing students to gather their own data, and making students more skilled analysts. These goals will be pursued through a mixture of case discussion, lecture, and hands-on exploration of a variety of data sets. The course is intended to introduce you to the fact that Organizations flourish when the people who work in them

flourish. Analytics can help make both happen.

### **MGT643 - International Business Strategy: Challenges and Opportunities**

**Credits: 3**

This course is focused on sensitizing participants and aiding them in understanding international business environment and markets. The participants will learn to categorize the challenges and opportunities present in international markets. The course will further focus on the internationalization behavior of MNCs and the strategies to ensure growth in global marketplace. The course will also emphasize on the learning of international business fundamentals such as international monetary system and foreign exchange mechanism. The ideas of international business will be advanced with contemporary examples, scenarios and cases. This unique blend of pedagogy will give comprehensive understanding about the international markets, and facilitate the students to deal with the challenges and successfully managing the international businesses.

### **MKT103 - Marketing Management**

**Credits: 3**

This course aims to introduce students to the basics of marketing. It is meant for students of all disciplines, including but not limited to arts, commerce, business, sciences, engineering who are interested in understanding marketing from academic as well as practical perspective. This course is specifically very important for those who intend to specialise in marketing.

### **MKT312 - Essentials of Marketing Research**

**Credits: 3**

This course will provide a comprehensive introduction to marketing research, and discuss key concepts, processes, and techniques, as well as their applications in marketing. This course will allow students to gain an appreciation of the breadth and depth of the subject and its significance for a business enterprise, whether a start-up or an established company. This course would be sensitive to the needs of undergraduate students with plenty of self-help for students and provide an exceptionally solid foundation to understand marketing research with a managerial orientation.

**MKT321 - Marketing of Services**  
**Credits: 3**

Services sector accounts for more than 50% of GDP in India. But the spectrum is diverse in marketing and/or selling a service due to its intangibility elements. An effective campaign that is well executed and which is linked around what it can do for its customers can help sell a product but marketing a service requires a different approach. Marketing a service requires marketing the "you" the provider and your team's ability to get the service done / delivered well. Marketing great customer service, tangibilising the intangibles offers a unique and exciting challenge which is different from giving product specifications on a brochure. This course is designed to be an intensive study of the concepts, practices, and development of strategies involved in the marketing of services. The material will focus on the unique aspects of services marketing, such as the attraction, retention, and building of customer relationships, demand management and quality control. The course covers a wide variety of services, including professional and business services. The main objectives of this course are to develop an ability to evaluate, implement and lead

effective marketing programs in service companies and organisations.

**MKT324 - Retail Management**  
**Credits: 3**

MKT 324 Retail Management course is offered for students who wish to do Major or Minor in the marketing domain. This course is aimed at teaching the fundamentals of retailing by introducing the students to concepts like online grocery retailing, category management, merchandising, retail branding, artificial intelligence in retail, retail supply chain, retail formats, store loyalty, retail pricing and shopper marketing. The course brings to light the changing dynamics of the retail industry with a focus on the Indian context. Students will also be exposed to the adoption of retail management across different countries, especially the American as well as the European perspective.

**MKT341 - Marketing Strategy for Consumer Behaviour**  
**Credits: 3**

The modern day marketing has become consumer need centric. Marketing strategists across the globe use consumer insights for launching and modifying their product or services. This course takes into account the key factors such as consumer motivation, perception, learning and their personality. This course also provides the students with information on key marketing processes such as consumer decision making, culture's influence, consumer research and basis of market segmentation. This course and its content would help students to understand the logic behind marketing strategies which are based on the consumer/s behavior.

**MKT352 - Advertising: Crafting Contagious Content**  
**Credits: 3**

This is an undergraduate level course focusing on the principles of advertising from content design, creativity and business value creation perspective. It covers advertising and media concepts, persuasion, psychology, composition and copywriting, typography, and brand communication. The course will cover advertising in India and fundamentals of form, function, and consumer behavior. Persuasion techniques such as motivation, organising messages, communicating with images, tapping into connotations, associations, and context will be covered. Throughout, the emphasis will be on creativity in internal as well as external communication that creates value for a profit or a non-profit entity.

**MKT501 - Products, Brands and Markets**  
**Credits: 3**

In this course, each of the Ps of the marketing mix are studied in-depth through the viewpoint of customers, competition, company and context (4Cs). The course particularly focuses on the customer whether B2B or B2C. It takes into account the heterogeneous nature of consumers and their varying wants, needs and buying habits. There is a focus on data-driven decision-making and how to assess market situations through these techniques. The course is designed to induce students to think critically about the marketing environment and its impact on the society. Discussion on different aspects of marketing such as understanding consumer behaviour, segmentation and positioning, marketing mix, relationship marketing, marketing communication tools and contemporary marketing practices exposes students to different marketing related

decision scenarios. Socially responsible marketing, technology enabled marketing strategies and the importance of ethics are discussed and debated during the course. This course is designed to enable students to realize the value of marketing in an organization, not just as a function but as a process involving the entire organization and a system which connects a firm to its customers. The course encourages students to engage in the classroom through participation based on pre-readings and team projects. It provides them with advice, space and resources to discuss and apply all the marketing concepts. In this course, the students learn nuances of marketing management such as marketing environment, needs, wants and demands, understanding consumer behavior, segmentation, targeting and positioning and introduction to marketing mix, importance of online and offline promotions, services and their uniqueness, relationship management and customer value analysis. The course brings students to think critically about the marketing domain as a whole and its impact on business and society.

### **MKT601 - Business to Business Marketing Credits: 3**

In the modern economy, behind every customer transaction lies numerous B2B transactions. Most of the concepts of consumer marketing apply to B2B Marketing, however the differences need to be explored. Advent of the internet has broadened sales and importance of digital marketing in business, thereby making this course imperative. The course introduces the students to branding and innovation, market segmentation, managing the market channels in a dynamic B2B business. A part of the course also introduces the students to pricing, target positioning with a focus on marketing communication and will touch upon

some of the effects of pandemic in a B2B business. This enable course will enhance the skills of the students to understand B2B marketing through projects of real life companies. It will enhance the skills to sense the bigger picture behind the B2B Model. Students will get hands-on experience while working on project of B2B companies and apply various skills learnt through cases of B2B companies to solve business problems.

### **MKT625 - Business of Sports - Marketing and Consumer Behaviour Perspective Credits: 3**

The business of sports is large, multi-dimensional, unique and interesting. The global sports market, comprising of infrastructure, events, manufacturing and retail of sports goods is estimated at around USD 700 billion. The sports industry is significant not just due to its size but also due to its close association with other sectors of the economy like education, real estate and tourism. This industry contributes to the general health and well-being of a country. Business of Sports – Marketing and Consumer Behaviour Perspective course aims to introduce students to the field of sports marketing. With learnings from this course, students will be able to analyze and apply marketing management principles in industries pertaining to sports. Sports management is a burgeoning industry in India and offers great career opportunities for professionals.

### **MKT631 - Sales and Distribution Management Credits: 3**

The course is designed as a detailed investigation of the sales management process. It balances the practical and academic while providing a foundation for understanding the sales

management function or building a marketing career. Issues covered include the sales process, recruiting, compensation, training and sales force design.

### **MKT642 - Interdisciplinary Approach To Consumer Understanding Credits: 3**

This course will help students understand consumers at a deeper level, using interdisciplinary concepts and methods. Understanding consumer behaviour needs an interdisciplinary approach – concepts and methods from several disciplines like neuromarketing, cognitive psychology, behavioural economics, anthropology, sociology, and more. Consumers often make irrational choices. Decisions are based on emotions and unconscious motivations – not only on rational logic. Consumer choices are implicit not explicit. Consumers cannot often express their motivations in response to traditional marketing research surveys. This is because consumers either won't say why they made some choices (as the answers might not sound logical and reasonable) or they can't say (as choices were made at an unconscious level and they themselves do not know why they choose a brand). The course will draw on the works of several neuroscientists and behavioural economists like Daniel Kahneman, Richard Thaler, and Dan Ariely. We will use behavioural economics experiments ('Nudge' as Richard Thaler calls it) to see how subtle interventions influence brand choices. We will explore how ethnography – a method of immersing oneself in consumer lives (used in anthropology and sociology) – can help us get under the skin of the consumer and observe the role of products and brands in consumer life, as lived and not as claimed in surveys.

### **MKT654 - Strategic Brand Management**

**Credits: 3**

Which brands make the customers happy? What draws the customers to these brands? How do companies create compelling brand experiences? How could you cultivate a brand that fosters customer engagement? This course takes a customer-centric approach to explore such questions with the goal of identifying the ingredients for building and managing inspired brands. To bridge theory and practice, the course interweaves lectures, case discussions, guest lectures and in and out-of-class experiential exercises.

### **SOM700 - Introduction to Research in Management Areas**

**Credits: 3**

Introduction to Research Areas in Management is a PhD-level course designed to expose students to contemporary and foundational research across key domains of management. Through a series of faculty-led seminars, students will critically engage with influential theories, methodologies, and contemporary research trends. The course fosters scholarly discussion, interdisciplinary thinking, and the development of research questions relevant to current managerial challenges. Emphasis is placed on introducing the students to current research programmes of the faculty in different areas of management. Students are expected to actively participate, present reflection notes, and develop preliminary ideas for future research work.

### **TOD205 - Database Management for Managers**

**Credits: 3**

The course covers three major stages of development of a database management system – DBMS, Relational DBMS and Object RDBMS, starting from the concept of data and database. Without making the course too jargon-heavy or technical, the aim is to guide students to design and optimize their own database designs for a specific system of their choice. The course proceeds with the progress of group projects.

### **TOD212 - Decision Sciences**

**Credits: 3**

Everyone makes decisions but very few think of building a method to their decision making. The course is designed to help students understand how to make better decisions. The course brings in the concepts of management science with the intention of helping students achieve better clarity in their decision making by understanding available information and the choices therein. The course aims to help students understand data better and apply logical and solid methodologies to arrive at the best possible decision given the information available

### **TOD221 - Operations Management**

**Credits: 3**

This course introduces students to the foundational concepts, tools, and techniques of Operations Management that are central to designing and improving business processes to deliver products and services efficiently. It emphasises how organisations create value through efficient resource utilisation, effective process design, and data-driven decision-making. Through case-based learning, simulation exercises and classroom discussions, the course connects conceptual insights with real-world

operational decisions in both manufacturing and service settings.

### **TOD310 - Predictive Analytics for Business**

**Credits: 3**

Predictive analytics is a critical skill in today's data-driven world. It empowers organizations to: Make better decisions: By anticipating future trends, businesses can optimize their operations, marketing, and resource allocation. Improve efficiency and reduce risks: Predictive models can identify potential problems or opportunities before they occur, allowing for proactive intervention. Gain a competitive advantage: Organizations that leverage data-driven insights through predictive analytics are better positioned to succeed in rapidly evolving markets. Address real-world problems: Predictive analytics has applications across various sectors, including healthcare, finance, marketing, and environmental science, allowing for more informed and impactful solutions to pressing challenges. This course provides an introduction to the field of predictive analytics, a powerful branch of data science focused on using historical data and statistical techniques to forecast future outcomes. We'll explore the core concepts and methodologies behind building predictive models, moving beyond simple data description to uncover patterns and trends that allow us to anticipate future events.

### **TOD322 - Supply Chain Management**

**Credits: 3**

Today's firms need to create & manage a synchronized supply chain to ensure all value adding competencies of the suppliers are transferred to the customers. At the same time, it is important that the supply chain is linked to the

overall strategy of the firm and closely linked with achievement of the strategic goals. This course provides the understanding of the fundamental concepts of Supply Chain Management. The topics covered include inventory management, coordination, demand and supply planning & strategic sourcing

**TOD324 - Service Operations Management**  
**Credits: 3**

India has the fastest growing (7.6 percent in 2024-25) service sector in the world contributing about 55 percent to the Indian GDP. Operational excellence is critical for success in many service industries today, global competition and rapidly evolving information technology. However, understanding service operations is not easy. Services are intangible, highly variable, not storable or transportable and often involve distributed operations with a significant amount of customer contact. This means that most service operations look quite different than manufacturing operations, and they often require specialized analytical frameworks and tools which the present course aims to address.

**TOD326 - Project Management**  
**Credits: 3**

In today's world, the discipline of Project Management is a powerful tool that helps organizations navigate their way effectively through times of change and uncertainty. An organization with a project culture is one that knows where it is going, is focused on results and has a professional team who knows what is expected of them. Professionals & organizations working or desiring to start a new venture in diverse fields require an understanding and insight of Project Management concepts and methods.

Projects are vital and often businesses and various functions start with this management operation. Initial activities within a function also start with projects, for e.g. Launching a new product in the market or implementing ERP within the organisation. The products are developed at lab scale, tried at pilot scale and produced at plant scale. To handle all these activities later in their careers, management students have to learn Project Management techniques and through planning and control techniques to execute projects.

**TOD331 - Supply Chain Analytics**  
**Credits: 3**

In today's dynamic business landscape, effective decision-making is the linchpin of success for organizations striving to achieve efficiency and profitability. The ever-evolving complexities of global supply chains, along with the need for precise and agile decision-making, have led to a growing demand for professionals adept in the art of Supply Chain Analytics. Throughout this course, students will gain a comprehensive understanding of how to model real-world supply chain dilemmas as optimization problems. They will explore the array of tools (including excel, python and simulation), methodologies (optimization, simulation, data analysis, forecasting), and technologies at their disposal, and how to apply them to unlock the full potential of supply chain operations. Whether it's streamlining logistics, optimizing inventory management, or enhancing demand forecasting, this course equips students with the skills to excel in the world of Supply Chain Analytics.

**TOD501 - Descriptive and Inferential Statistics**  
**Credits: 1.5**

NOTE: THIS COURSE WAS EARLIER CALLED TOD501 PROBABILITY AND STATISTICS. This course enables students to manage and analyze data to make informed decisions. It develops skills to summarize data using numbers and visuals, and to use data from a sample to draw valid conclusions about the underlying population. While statistical software is used to automate the computation of data summaries and the conduct of statistical tests to perform inference from sample to population, the course focuses on developing statistical intuition that guides the conduct of tests and the interpretation of results.

**TOD504 - Mathematical Methods for Economics**  
**Credits: 3**

This is a postgraduate level introductory course suitable for all Masters programs which need which need sufficient knowledge and depth in mathematical methods for further applications in respective areas. Contemporary graduate level studies in economics, finance, engineering, businesses, and applied sciences are incomplete without the skills to apply mathematical tools to represent and analyze theory as well as to interpret and find solutions to the problems. Before students can apply these mathematical techniques at advanced level of their respective subjects, it is essential that they are well acquainted with the concepts and tools of mathematics, ranging from calculus to linear algebra and real-analysis to optimization techniques. This course covers such range of topics, and prepares the students for further application of mathematical models in all fields.

**TOD522 - Supply Chain Management**  
**Credits: 1.5**

This course provides a comprehensive understanding of Supply Chain Management (SCM), covering key concepts such as inventory management, supply chain coordination, logistics, sourcing, and network design. Through case studies, simulations, and problem-solving exercises, students will learn how to analyze, design, and optimize supply chains to improve efficiency and responsiveness.

### **TOD524 - Operations Management**

**Credits: 2**

To focus students' attention to the necessity of great operations to drive excellence (manufacturing & services). Operation deals with the firm's ability to successfully and competitively transform raw inputs (land, labour, materials, capital, information etc.) into viable goods & services. The firm focuses on remaining competitive & innovative through excellent operations. This course introduces students to problems and analysis related to the design, planning, control, and improvement of manufacturing and service operations. Class sessions involve explaining concepts, working examples, and discussing cases. A wide range of topics are covered, including: process analysis, quality management, project management & operations strategy.

### **TOD526 - Project Management**

**Credits: 2**

In today's world, the discipline of Project Management is powerful tool that will help organizations navigate their way effectively through times of change and uncertainty. An organization with a project culture is one that knows where it is going, is focused on results and has a professional team who knows what is

expected of them. Professionals & organizations working or desiring to start a new venture in diverse fields require an understanding and insight of Project Management concepts and methods. Projects are vital and often businesses and various functions start with this management operation. Initial activities within a function also start with projects, for eg. Launching a new product in the market or implementing ERP within the organisation. The products are developed at lab scale, tried at pilot scale and produced at plant scale. To handle all these activities later in their careers, management students have to learn Project Management techniques and through planning and control techniques to execute projects.

### **TOD531 - Analytics Lab**

**Credits: 1**

In today's world effectively presenting data analytics in a compelling narrative to a particular audience is essential for managers. Data Analytics Lab teaches the fundamentals of data analytics, data visualisation, and communicating effectively with data. The course is about understanding data, data structures. The course focuses on tactics and strategies related to exploring, analysing, delivering, and communicating data. There will be several exercises using EXCEL and R, which will help students understand how to work with data in a real-world context. The course has a strong practical orientation, emphasizing critical thinking skills, the ability to ask the right kinds of questions for data analysis, and the creative aspects of designing a data analytics approach capable of delivering a convincing analysis that would support decision making.

### **TOD533 - Introduction to AI: A Management Perspective**

**Credits: 3**

The field of Artificial Intelligence (AI), inaugurated in a summer workshop at Dartmouth College in 1956, has seen many ups and downs. After two short-lived booms in the early eighties and the late nineties, AI has come into its own in the last decade, partly because data-driven machine learning has tackled a wider range of problems than earlier approaches based on search, logic, and (human) expert knowledge. After a brief introduction to other areas of AI – game-playing, symbolic reasoning, knowledge representation, and planning – our course will focus mostly on machine learning. Together, machine learning and traditional statistics constitute data science, with everyday uses such as e-mail spam filtering and handwriting recognition and business applications such as credit rating, bankruptcy prediction, customer churn modelling, and employee turnover analysis. Today's business graduates must learn about these applications of AI (particularly machine learning) to remain competitive in the field of management. AI also attracts significant investment in the financial markets. Hence, a good understanding of the field is critical to making smart investments in information technology.

### **TOD601 - ANOVA and Regression**

**Credits: 1.5**

NOTE: THIS COURSE WAS EARLIER CALLED RES601 QUANTITATIVE RESEARCH METHODS. This course introduces some of the key basics of inferential statistics, such as hypothesis testing concerning two populations, analysis of variance (one-way, two-way, and multivariate), and regression analysis (multiple regression; regression with qualitative predictors, logistic regression).

## **School of Arts and Sciences**

### **BIO101 - Introductory Biology**

**Credits: 3**

Introductory biology is a gateway course that is essential for all biology majors and minors. A clear comprehension of the material in this course is essential for the successful completion of other courses in biology. The course covers modern biology at the molecular and cellular level and includes biological macromolecules, the biochemical and biophysical processes in respiration, energetics, metabolism, photosynthesis, cell signaling, and cell reproduction. These fundamental topics in turn lead to the genetic basis of life with classical and modern understanding of inheritance, an understanding of genes, DNA, RNA, and proteins, in sexual reproduction. The initial part of the course concludes with an introduction to biotechnology and genomics with an emphasis on laboratory techniques, genome mapping, and proteomics. The second part of the course applies our understanding of modern biology, including biotechnology, to viruses and single celled organisms such as prokaryotes (bacteria and archaea), protists, fungi, and to seed and seedless plants. No background is assumed other than basic chemistry and biology at the school level. This course can be taken by non-biology students and satisfies the general education requirement (GER). Students cannot register for both Introductory biology and BIO 107 (Concepts of biology).

### **BIO104 - Environmental Science**

**Credits: 3**

Today, human activities have been the dominant influence on the environment and ecosystem. It is

for this reason that we must learn the environmental issues. Environment is not yesterday's concern, it is today's worry on how to make it more sustainable without over-exploitation of natural resources and destructions of ecosystems. This course shall include topics on ecology, biodiversity, conservation, pollution, climate change, and environmental policies and laws. The best way to learn about the environment is to learn from events that are happening around us. Thus, the course is aimed at discussing each topic on environment by bringing in examples that are based in the Indian context.

### **BIO106 - Introductory Biology practical**

**Credits: 1.5**

Biology is a branch of science dealing with studies of living organisms. This course will enable students to be aware about laboratory instruments, biosafety measures and microscopy. The course also focuses on details regarding the diversity of life by studying various animals, plants and microbes. The course will help students get an idea of using the principles of Microscopy, Microbiology, Cell Biology, Classification, Genetics and Molecular Biology in brief.

### **BIO107 - Concepts of Biology**

**Credits: 3**

Concepts of Biology is an introduction to biology for non-biology majors and covers all the major concepts of biology in a single semester. This course aims to provide the necessary information and knowledge about biology that is conceptual, easy to understand, and meaningful in daily life. Knowledge gained in this course will allow the student to negotiate many of the topics and major advances in the biological and biomedical sciences that appear in the daily media, and which

play an important role in our lives. Along the way, students will gain an understanding and appreciation for the diversity of life. The topics covered in this course include modern biology: cellular and molecular basis of life; cell division, genetics, and heredity; and biotechnology. At the level of the organism the topics include: evolution and diversity in plants and animals; animal tissue and physiology; and ecology. No prerequisites are required. This course satisfies the general educational requirement (GER) for the life sciences. Biology majors and minors cannot register for this course, but instead are required to register for BIO 101, Introductory biology.

### **BIO114 - Microscopy and Imaging**

**Credits: 3**

Microscopy & Imaging is an elective course designed at teaching the fundamentals of microscopy by introducing the students to concepts of optics, principle, instrumentation, Applications of different microscope, sample preparation, staining (if required) and image formation. Students will also be acquainted to the use of microscope in the laboratory through hands on sessions. It is an entry level course aimed at preparing the undergraduate and doctoral students for better understanding about microscopy & its application in biological sciences.

### **BIO200 - Human Physiology**

**Credits: 3**

This is an introductory undergraduate course aimed at teaching the fundamentals of human physiology by introducing the students to the different organs and organ systems of the body. Students learn the important organ systems of the body and are also fostered to correlate the

functioning of different organ systems with the anatomy as well as diseased conditions. This course is aimed at preparing the students for critical understanding of the human body and correlates their learning with the molecular biology and cell biology courses in the later semesters.

### **BIO203 - Biochemistry and Genetics Practicals** **Credits: 3**

Biochemistry •Paper Chromatography of plants  
•TL Chromatography of biomolecules  
•Qualitative estimation of carbohydrates  
•Qualitative estimation of proteins and other biomolecules  
•Spectrophotometric estimation of Nucleic acids  
•Spectrophotometric estimation of proteins and biomolecules  
Genetics •Study of Mendelian Inheritance and gene interactions (Non-Mendelian Inheritance) using suitable examples.  
•Study of various stages of mitosis using cytological preparation of Onion root tips.  
•Study of Human Karyotypes (normal and abnormal).  
•Chromosome Banding  
•Transduction  
•Conjugation.

### **BIO205 - Molecular biology and Bioinformatics practical** **Credits: 3**

Molecular Biology •Nucleotide isolation methods  
•Quantification of Nucleotides  
•Primer design and PCR  
•Restriction enzyme digestion  
•Molecular cloning  
•Protein isolation  
•Bradford assays  
Bioinformatics •Databases: Types and utility  
•Tools for extracting data from different types of databases  
•Homology modeling  
•Molecular docking

### **BIO206 - Physiology Laboratory Course** **Credits: 1.5**

The practical course on physiology will cater to the hands-on training of the students in the field of physiology (particularly Human Physiology). The students will learn to prepare blood smear, stain blood smear, perform total count of RBC, total and differential count of WBC from their own blood (students will use haemocytometer for counting). Students will also perform Body mass index and Body Surface area measurements and learn to measure blood pressure under different conditions. They will also learn to identify different human tissues under microscope using prepared permanent slides.

### **BIO209 - Basic Biochemistry** **Credits: 3**

Biochemistry is the study of biomolecules that make us. This introductory course in biochemistry intends to provide a solid foundation about the four major classes of biomolecules: carbohydrates, proteins, nucleic acids and lipids. The structure of these biomolecules from basic building blocks to large polymeric entities will be covered in detail. The correlation between the structure of a biomolecule and its specific function inside the cell would be emphasised. Finally, enzymes which are at the heart of biochemistry and biochemical reactions inside cells would be described in terms of their structure, kinetics, regulation and inhibition.

### **BIO211 - Molecular Biology** **Credits: 3**

Molecular Biology is an introductory undergraduate course, aimed at teaching the fundamentals of cell and molecular biology by introducing the students to the concepts of organization of DNA inside the cells, reinforcing

the central dogma of life upon them, structure and properties of DNA and RNA, organization of genetic material inside the cells, replication, transcription, translation, recombination and repair. This course is a core subject in the DBLS's iMSc program. It is a course which requires basic knowledge of biology and is aimed at preparing the students for critical understanding of molecular biology and the interdisciplinary nature of the subject. The strong interdisciplinarity in the subject will aid the student towards a strong foundation in life sciences.

### **BIO213 - Basics of Bioinformatics** **Credits: 3**

The twenty-first century is the century for biological sciences; and data analytics would play a significant role in harnessing the full potential of this field. Life, at the molecular level, involves interaction between different biomolecules such as DNA, proteins, etc. This course will introduce the key concepts in the context of these biomolecules and present in detail their sequence and structural features and other important characteristics. Algorithms designed to compare the sequence of proteins would also be discussed. Students would have an opportunity to apply various computational methods to unravel functional information from biological data. The course would introduce key bioinformatics concepts such as sequence alignment, comparative genomics, data mining etc. This interdisciplinary course aims at helping students to develop a perspective on the application of computational methods to biological sciences.

### **BIO260 - Introduction to Plant Biology** **Credits: 3**

This is a general introduction to the plant's fascinating world. This course introduces students to the fundamentals of plant nomenclature, classification, reproduction, and anatomy with an emphasis on flowering plants (angiosperms).

**BIO261 - Plant Biology Practical**  
**Credits: 1.5**

This course is designed in conjunction with the core theory BIO260-Introduction to Plant Biology Course. This will cover the practicals to study and understand the evolution from lower to higher forms of living species in eukaryotes such as from fungus to flowering plants. The flowering plants (angiosperms) will include studies of plant morphology, anatomy, and physiology of different plant systems of monocots and dicots.

**BIO310 - Genetics**  
**Credits: 3**

This course covers principles of prokaryotic and eukaryotic cell genetics. Emphasis is placed on the molecular basis of heredity, chromosome structure, patterns of Mendelian and non-Mendelian inheritance, evolution, and how does it affect the different allelic interactions, as well as its applications in various fields of biological sciences like Epigenetics and Cancer biology. Upon completion, students should be able to recognize and describe genetic phenomena and demonstrate knowledge of important genetic principles.

**BIO360 - Introduction to Biological Rhythms**  
**Credits: 3**

This course explores the concept of biological rhythms, including circadian, ultradian, and

infradian rhythms, and their roles in regulating physiological processes. Emphasis is placed on circadian rhythms, sleep, and the interaction between biological clocks and health. Students will learn the mechanisms underlying biological rhythms, focusing on their physiological, psychological, genetic, and environmental regulation in humans, as well as the impact of rhythm disruptions on human health.

**BIO500 - Recombinant DNA Technology**  
**Credits: 3**

This course will provide an insight to the application and interpretation of high-throughput molecular biology methods used to produce high-volume biological data using genomics, transcriptomic, proteomics, and metabolomics, which will allow to analyze the components of a living organism in their entirety and provide new insights into the complexities of organism function. The applications of these technologies will allow the thoughtful experimental design, data collection, analysis and interpretation. This course will provide theoretical bases to properties and applications of versatile DNA modifying enzymes, cloning strategies, vector types, host genotype specificities for selection and screening of recombinants and/or recombinant transformants. The knowledge gained can be applied to a range of disciplines in biology, from genetics, disease biology, biomedicine, agriculture and fisheries.

**BIO543 - Developmental Biology**  
**Credits: 3**

How does an entire organism develop from a single cell? This is the question that the course will try to answer. The course will cover organism development starting from the zygote, embryonic

development, tissue specification & organogenesis, concept of stem cells as well as developmental genetics. This is an advanced course that builds on basic cell biology and genetics courses.

**BIO553 - Animal Behaviour**  
**Credits: 3**

Do you want to understand how and why animals behave the way they do, and how we test hypotheses about behaviour scientifically? This course provides an introduction to the complexities of animal behaviour, and how it is studied. Students will explore the various behaviours animals adopt in order to meet the challenges of their daily lives. We begin with how animals learn and communicate with each other, then move on to discuss how they find food, avoid predators, choose their mates, and rear their offspring. This course is aimed at anyone looking to broaden their understanding of animal behaviour beyond nature documentaries or a typical high school education. No previous knowledge is required, only curiosity and enthusiasm for the subject.

**BIO554 - Forensic Biotechnology**  
**Credits: 3**

Forensic Biotechnology is an advanced elective course that delves into the application of biological sciences in forensic investigations, with a strong focus on molecular biology techniques. It introduces students to the fundamentals of forensic science and explores recent advancements in forensic biotechnology. The course covers the principles and practices of DNA fingerprinting, illustrated through high-profile case studies such as the Ahmedabad plane crash and the Rajiv Gandhi assassination investigation.

Key topics include the ethical and legal considerations of DNA profiling, the use of single nucleotide polymorphisms (SNPs), short tandem repeats (STRs), next-generation sequencing (NGS), and the application of genetic markers in ancestry and phenotypic prediction. Students will gain hands-on experience with both basic and advanced molecular biology techniques used in DNA profiling. Special emphasis is placed on certification processes and the critical role of DNA evidence in the Indian Judiciary System. This course equips students with a comprehensive understanding of forensic biotechnology and its practical application in legal and investigative settings.

**BIO575 - Special topics in the Life Sciences: Scientific texts in context--Papers in Microbiology**  
**Credits: 3**

Microbiology today is a well established discipline both within medicine and in biology more broadly, and in the post-COVID19 era it is difficult to imagine a world without a knowledge of viruses and bacteria and the havoc they can wreak in our lives. But the idea that such invisible creatures could cause disease is relative new in human history, less than 2 centuries, in fact. Microbes themselves were first discovered in the 17th century with the development of microscopes, and although their connection to disease was not understood until the 19th century, ideas about what caused and helped spread infectious diseases had existed for centuries before. This course surveys a history of microbiology through a close reading of a series of seminal papers representing important nodes in the history and understanding of the field juxtaposed with commentaries by other scientists or scholars in the humanities and social sciences

who have put these discoveries in various historical, social, cultural and intellectual contexts.

**BIO598 - Master's Thesis II**  
**Credits: 6**

The course is designed for the students of the Integrated Master of Science in Life Sciences Programme who opt to do a Master's thesis. In this course, the students use the information gained from the literature review and basic experiments carried out during BIO596 to define a research problem, and the aims of the thesis, and learn the techniques necessary for conducting the proposed research.

**BIO600 - Evolutionary Biology**  
**Credits: 3**

Dobzhansky (1973) famously argued that "nothing in biology makes sense except in the light of evolution". Evolutionary Biology is the study of the changes in life forms over time - changes that have occurred over millions of years as well as those that have occurred over just a few decades. In this course, we will look at the various mechanisms of evolution, how these mechanisms work, and how change is measured. This course will begin by reviewing the evolutionary concepts of selection and speciation, phylogenetics and history of life. We will then learn natural selection and adaptation, evolutionary processes, and genes-genomes-phenotypes. The course will wrap up with a look at the evolution and modern society. At the end of this course, students will have a better understanding of the evolution of life. Also, this course will prepare students for future study and research in macroevolution, microevolution, genetics, behavioral biology, evolutionary medicine, and computational

biology.

**BIO601 - Epigenetics**  
**Credits: 3**

Most of the people have an understanding that our outward characteristics are determined by the genes encoded by the sequence in our genome. But it is not that straight forward as, if the DNA in all cells are the same then how a liver cell decides to make a liver and not the skin. There should be some factors determining the number of genes to turn on and off depending on whether it's a liver cell or the skin cell. Few sets of genes are turned on and off in making a liver cell a liver cell and a skin cell a skin cell and this is known as epigenome. Epigenetics is a set of heritable changes in gene expression that takes place in the cells without changing the DNA sequence. This course deals with the epigenetics and the role of various epigenetic modifications in the development and diseases.

**BIO666 - Conservation biology: a real world understanding via case studies**  
**Credits: 3**

The natural world is threatened by several disturbances that impact the survival of living organisms including humans. To protect the living world and for sustenance of biodiversity, the field of conservation biology has evolved. Since there is no silver bullet that will rescue a threatened species or eradicate an invasive one, the field of conservation biology attempts to protect biodiversity by relying upon a range of different tools and techniques, spanning diverse fields of study, including biology, engineering, medical sciences, and management. The overarching goal of the field of conservation biology is not only to protect biodiversity but also to create a peaceful

coexistence between humans and wildlife. With this thematic background, the course will explain the concepts and principles governing the field of conservation biology. The course will cover case studies, through which the students will develop an understanding of the practical aspects of the field of conservation biology, how and in what ways the science-based conservation can be applied to protect the biodiversity. The chosen case studies will be covering a wide range of taxa, and will showcase research outcomes from both within the country and as well as from outside. The selected case studies will also highlight both successful and failed conservation attempts, in order to teach the students, the challenges associated with experimental science in the field of conservation and how science-based solutions can be translated to save the biodiversity of the planet earth.

**BIO775 - Special topics in the Life Sciences: Scientific texts in context--Papers in Microbiology**  
**Credits: 4**

Microbiology today is a well established discipline both within medicine and in biology more broadly, and in the post-COVID19 era it is difficult to imagine a world without a knowledge of viruses and bacteria and the havoc they can wreak in our lives. But the idea that such invisible creatures could cause disease is relative new in human history, less than 2 centuries, in fact. Microbes themselves were first discovered in the 17th century with the development of microscopes, and although their connection to disease was not understood until the 19th century, ideas about what caused and helped spread infectious diseases had existed for centuries before. This course surveys a history of microbiology through a close reading of a series

of seminal papers representing important nodes in the history and understanding of the field juxtaposed with commentaries by other scientists or scholars in the humanities and social sciences who have put these discoveries in various historical, social, cultural and intellectual contexts.

**BIO790 - Rotation in Lab**  
**Credits: 4**

**BLS898 - Research Proposal Preparation**  
**Credits: 0**

Research proposal

**BLS899 - Thesis Work**  
**Credits: 0**

In this course, the doctoral student, under the guidance of the dissertation advisor, will prepare a research proposal for his/her doctoral work for presentation to the Dissertation Advisory Committee. The research proposal should include the origin of the problem, objectives of the proposed work, literature survey, methodology, facilities required and any other details.

**BLS899 - Thesis Work**  
**Credits: 0**

Thesis work

**CSC210 - Introduction to Data Structures and Algorithms**  
**Credits: 4**

This course provides a hands-on, project-based introduction to fundamental data structures and algorithm design principles. Students will learn to analyze, design, implement, and evaluate various

data structures and algorithms to solve real-world computational problems through engaging projects. The course emphasizes the practical application of these computer science concepts in group projects that are of an interdisciplinary nature, fostering a deep theoretical, practical, and applied understanding of their trade-offs and suitability for different scenarios. Students will work collaboratively and independently to create functional software modules, developing technical proficiency and critical thinking skills. The programming language used for project implementation will be either C++ or Java.

**ENV602 - Air Quality**  
**Credits: 3**

This is an elective course for PhD programme in Physics, PhD programme in Management, and minor in 'Environment and Sustainability'. The course aims at introducing the concept of air pollution and its various components. The course covers important aspects of air pollution such as its dispersion and transport, effects – health and visibility, and methods of quantification. Air quality (AQ) and air quality index (AQI), AQI standards and measurements and quantification using various platforms (in-situ, modelling, and satellite remote sensing) are discussed. A unique component of this course is field work related to AQ measurement using low-cost sensors and furthermore its scientific analysis leading to AQI.

**GER 111 - Conversational German I**  
**Credits: 3**

This elementary German language course aims to equip new learners with the ability to use German for 'everyday' purposes. It aims to expose students to aspects of German culture and history. As an introductory course it aims to engender an

appreciation for the language and its culture(s). This is the first of four courses in Conversational German. Students are expected to undertake daily practice by revising 1-2 hours a week outside of class. This language course will have three sessions every week of a duration of 1 hour each. This course is open to all students across the University.

### **HST101 - Ahmedabad as a Gateway to the World**

**Credits: 3**

The city of Ahmedabad has been at the crossroads of major historical currents. A key commercial centre of western India, Ahmedabad was at the vanguard of industrialisation in modern India. Ahmedabad via the coastal port cities such as Surat was a gateway to the sea routes of the Indian Ocean via the Arabian Sea, home to influences from West Asia as well as peninsular South Asia. Although the city functioned as a political and administrative centre, it had a strong tradition of craft goods production, merchant entrepreneurship, and banking and financial services. It maintained thriving trade contacts with neighbouring towns and port cities as well as imperial centres at Delhi and Agra. In 1700 AD, Ahmedabad was, by some estimates, the sixth most populous city in the world [1]. Today, it continues as one of the most populous cities in India, a key node of national politics as well as business and urban development initiatives and emblematic of the opportunities and challenges before contemporary Indian society, wherein modernist development paradigms have been superimposed on traditional social structures. The course will help students understand the city as an arena for economic activities (industry, trade and commerce, and informal work), merchant communities, entrepreneurship, city life and

culture, and global engagement over the centuries. It will also examine the causes and consequences of conflicts over material and symbolic resources, which have been key to the social organisation of the city. It examines various efforts at urban development charting the city's built form for the future. Through a combination of lectures, classroom discussions, and projects the course encourages students to analyse these historical and contemporary processes in Ahmedabad in the wider historical context of Gujarat. Through these experiences, students will receive an introduction to disciplinary concepts and theories that will be built upon systematically by later courses in the student's chosen major. 'Ahmedabad as a Gateway to the World' is a mandatory course for all BA students majoring in History or SPS (Social and Political Sciences), and for all Integrated MBA students. [1] According to the Financial Times. See <https://www.youtube.com/watch?v=pMs5xapBewM&t=5s>.

### **HST102 - The Birth and Development of Civilisations in the Indian Subcontinent**

**Credits: 4**

This course introduces ancient Indian history by focusing on early civilisations from the emergence of Harappa and Vedic to the cultural developments during the Gupta Empire period (600 CE). It discusses the economic, social and cultural developments for three millennia beginning from 2600 BCE. The course familiarises the students with some of key events and processes such as the emergence and decline of the Harappa Civilisation, debates surrounding the migration and settlements of the Indo-Aryan speakers, economic transformation of the central Ganga valley, cultural and religious churnings related to Buddhism and Jainism, the Sangam

period developments in Peninsular India, and the so-called "Golden Age" during the Gupta Empire. These themes will be discussed by focusing on the textual, archaeological, and epigraphical sources.

### **HST105 - Introduction to the history of biology and medicine**

**Credits: 4**

Built on the premise that in order to make sense of the world around us, we need to better understand how we got here, this course offers a broad strokes survey of the development of the biological (life) and medical sciences over roughly 2500 years of human history. Following an introductory unit in which we will familiarize ourselves with some fundamentals of the nature of scientific inquiry and practice, the course will examine events from different periods from antiquity to the modern day where these principles and practices were applied in order to better understand the living world. The mutual impact of the happenings in society--e.g. disease outbreaks, the development of technologies--and the growth of scientific/medical knowledge will also be examined.

### **HST201 - Trade and Religion in the Indian Ocean World**

**Credits: 4**

This is a global history core course for History Major. The course considers the agency of trade and religion in mediating cultural identities in the Indian Ocean world. Trade involves the exchange of goods. Long-distance trade requires merchants to enter into exchange relationships with people from other cultures. Trade contacts facilitate reciprocal understanding by intersecting with myriad other aspects of human life including religious beliefs. Religion is often defined as a

frozen set of precepts, rituals, and moral codes of behaviour. Contrary to this, religion in the early modern period (c. 1500 – c. 1800) exhibited an extraordinary dynamism and fluidity as it moved across geographies. By focusing on trade and religion in the Indian Ocean world, the course discusses the changing perceptions of different social groups as they came into closer contact. The Indian Ocean has been one of the oldest world regions that facilitated trade and cultural interactions. The exchange of goods, ideas, technologies, microbes, and plants was often mediated by merchants, mercenaries, and monks straddling across the Indian Ocean regions. In the early modern period, the diversity of peoples from Southeast Asia, South Asia, the Islamic heartlands, East Africa and Europe made the Indian Ocean an emerging globalising arena that brought multiple cultures and religions to closely interact. This led to the processes of identity formation, dissemination and adaptation of cultural practices, and contestations and compromises in forging an open, cosmopolitan society. Understanding this substratum of the historical past will enable us to better understand globalisation.

### **HST220 - Science, Technology, and the Making of the Modern World**

**Credits: 4**

The world as we know it today is characterised by a high degree of globalisation, by the political and economic prominence of industrialised nations, and by the primacy given to science and technology in most societies. How did such a world come about? The course explores this question by tracing the development of modern science and technology and its relationship with imperialism and other engines of globalisation in the last five centuries. In it we will look at a range

of viewpoints, thus trying to move away from a purely Eurocentric account.

### **HST312 - The Making of Early Modern India, 1300-1800**

**Credits: 3**

This course offers a comprehensive understanding of the early modern period in the history of the Indian subcontinent. Spanning 1300 to 1800, this transformative era has provoked significant historiographical inquiry, from colonial interpretations to contemporary analyses. Framed by the tensions between this period's characterisation as medieval or early modern, the course examines key themes in the political, economic, social and cultural history of the period. Topics include state formation, political economy, land and taxation, religious negotiations and literary and cultural transformations. While attending to questions of kings and empires, this course pays special attention to the circulation of saints, soldiers, poets, and merchants whose overlapping multilingual and multidirectional networks have given fresh impetus to the study of South Asia between 1300 and 1800. Students will engage with a wide range of primary sources—including textual, visual, and material artefacts—alongside critical secondary readings. This reading-intensive course aims to develop students' ability to critically examine primary sources, analyse diverse historical perspectives and contextualise the interconnected worlds of South Asia between 1300 and 1800.

### **IHS701 - Key Concepts in Social Theory**

**Credits: 3**

This is an advanced course in exploring critical concepts in social theory. Important explanatory

concepts such as representation, agency, class, caste, gender, modernity, intersectionality, state, subject-subjectivity, and identity among others will be explored in a historical and analytical dimension, such that students come to understand what is at stake in identifying (or not identifying) something as an instance of one of these concepts. The course will also introduce students to the history of debates surrounding these concepts such that they understand the contestations around their use. The course consists of four modules: 1. Reading the Social World 2. Culture and Colonialism 3. Nationalism, state, and political communities 4. The Social Subject

### **IHS725 - Sanskrit for Research**

**Credits: 3**

This course is an intensive introduction to scholastic Sanskrit, covering not only aspects of advanced grammar but also - perhaps more importantly - initiating students into the practice of reading Sanskrit texts. This course will enable students to take further PhD level courses which may require the close analysis of scholastic texts in Sanskrit, in case the students become interested in pursuing this direction of research. PhD students often come to the University with varying degrees of prior knowledge of the language and this course will enable the instructor to identify the students' exact level and tailor the course accordingly. In order to do so, the course will proceed by way of reading Sanskrit texts in the original and students will be required to prepare before each session their translations of the text assigned. Depending on the students' ability and grasp of the language, specific grammatical topics will be discussed as needed. During the course, students will be assigned readings from at least two texts - one from a literary work (such as the epics) and the second from any intellectual

discipline (śāstra) (such as philosophy, medicine, law, etc.). The texts chosen will also pertain to the specific research interests of the students, thereby serving a dual purpose. Firstly, this will enable them to understand first-hand the grammatical variations in the uses of Sanskrit across textual genres and intellectual disciplines (abstract nouns, compounds, verbal forms, etc.). Additionally, the close reading of such influential texts will enable students to identify the key concerns for the thinkers of the respective Sanskrit tradition, which may often be significantly different from those of the corresponding Anglo-European intellectual tradition. Such an understanding can also help shape the research topics that students may explore during their PhD. As is usually the case with Sanskrit reading courses, the texts chosen will vary from year to year depending on the research interests of the student and the instructor. For Monsoon 2025, we propose to read sections from the following two works: the Vālmiki-Rāmāyaṇa (specifically, Chapters 55-57 from the Aranyakāṇḍa in light of the three commentaries Bhūṣaṇa, Tilaka and Śiromaṇi) and Śālikanātha's Prakaraṇpañcikā (specifically, the chapter on the nature of perception titled the Pratyakṣapariccheda in light of the commentary Nyāyasiddhi).

### **LIT105 - Urdu Prose and Poetry**

**Credits: 3**

The course teaches the Urdu script and introduces students to well known literary prose and poetry in Urdu. Once command of the script is achieved, the course focuses on reading selections of literary and poetic compositions in Urdu. Students also write their own poetic and literary compositions towards the conclusion of the course to share with the class.

### **LIT230 - Gira Gujarati**

**Credits: 3**

The course Gira Gujarati aims at introducing the literature written in Gujarati to the course participants. It consists of a variegated and fascinating collection of easy to read Gujarati stories and poems written by a host of celebrated Gujarati writers and poets – Narsinh Mehta, Narmad, Govardhanram Tripathi, Kanhaiyalal Munshi, M K Gandhi, Pannalal Patel, Zaverchand Meghani, Umashankar Joshi, Mareez, Dhumketu, Joseph Macwan, Ramesh Parekh, Kundanika Kapadia, Raghuveer Chaudhary, Suresh Joshi, Himanshi Shelat, Neerav Patel, Dalpat Chauhan and a few more. Almost all selected texts have been translated into English; a parallel reading of the translation in English could make the Gujarati literary pieces more accessible. The course proposes to inspire a passion for reading literature, particularly vernacular literary texts; reading literature in one's own first language is not only a source of happiness, but also ushers one into the understanding about the social, cultural, historical and/or political contexts. Since the course is offered in Gujarat and the city of Ahmedabad, one of the special perks the course participants will be able to gain from, will be the presence of contemporary writers and poets of Gujarat. Up to two to three sessions will host an Expert Talk to be delivered by a renowned literary figure whereby the course participants will be able to discuss the literary texts with the very writer/poet of the same, or benefit from a dialogue with an acclaimed writer/poet. There are no specific courses as pre-requisites for this course, though it is expected that students have basic fluency in spoken and written Gujarati.

### **MAT123 - Precalculus**

**Credits: 3**

This course introduces fundamental mathematics concepts, including real numbers and their properties, functions, algebra, coordinate geometry, basic trigonometry, sequences and series, and problem-solving. It emphasizes mathematical modeling and real-world applications, including linear, exponential, logarithmic and trigonometric functions. The aim is to make learning enjoyable while ensuring a strong foundation for university-level quantitative skills and preparing students for calculus. This course may especially be useful to students who have not studied mathematics in classes 11th and 12th. Through interactive sessions, puzzles, and interdisciplinary exercises, students will engage deeply with mathematics, gaining confidence and proficiency in quantitative skills. The examples and exercises span interdisciplinary applications in economics, biology, physics, and more, demonstrating the practical relevance of mathematical principles in various fields. This course equips students with the necessary mathematical groundwork for success in calculus and other fields where mathematical proficiency is essential.

### **MAT142 - Introductory Calculus**

**Credits: 3**

This course is one of the core requirements for the Bachelor's programmes in Economics and Business. Students of Bachelor's programmes of other disciplines may take it to fulfill the GER. Calculus is an important mathematical discipline that deals with change and motion. It is extremely useful not only in physics, and engineering, but also in many other diverse areas including, biological sciences, business and economics. This course is a comprehensive introduction to the elementary concepts of

calculus namely, Limits, Derivatives and Integrals with some of their applications, including related rates, linearization and differentials, optimization and numerical algorithms like Newton's method. The applications are drawn from many fields and include related rates, linearization and differentials, optimization and numerical algorithms like Newton's method. The course is aimed at first-year undergraduate students of any field. A familiarity with high-school mathematics up to 12th grade is assumed. The student entering this course must pass a placement test. The test checks the students' familiarity with topics in precalculus mathematics (non-Calculus prerequisite topics covered in school mathematics up to 12th standard mathematics for eg. trigonometry, coordinate geometry and elementary conic sections etc). If the student does not pass this test the student will not be allowed to enroll in MAT 142.

### **MAT146 - Intermediate Calculus** **Credits: 3**

This course satisfies the core requirements for some of the students of the Bachelor's programmes in the Economics and Business majors. It may be taken as a GER by students of Bachelor programmes of other disciplines. This course is a second course in Calculus. It broadens and deepens a student's knowledge of elementary Calculus. The course covers some applications of definite integrals to Volumes, Arc Length and Areas, Integrals of Exponential and Logarithmic Functions and applications, some new techniques of Integration- including Integration by Parts and Partial Fractions, Differential Equations and Applications, Taylor Series with applications and an Introduction to Partial Derivatives. Students who are planning on taking this course must have studied calculus in

XI or XII standard OR passed MAT142 Introductory Calculus. Students who have not taken MAT142 Introductory Calculus must pass the MAT142 Challenge Test. The applications are drawn from many fields including Economics, Physics and Engineering. The course is aimed at first-year or second-year undergraduate students of any field who have the correct preparation. A familiarity with the contents of Introductory Calculus (MAT 142) is assumed

### **MAT165 - Gateway to Abstract Reasoning** **Credits: 3**

The primary goal of this course is to establish the groundwork for abstract reasoning in mathematics, showcasing the effectiveness of the axiomatic approach to the subject. This course lays the groundwork for mathematics and its application across all STEM disciplines. It also aims to illustrate how a basic observation can frequently yield impactful outcomes.

### **MAT215 - Elementary Number Theory and Cryptography** **Credits: 3**

This course introduces students to the fundamental concepts of elementary number theory and their applications in modern cryptography. Topics in number theory include divisibility, prime numbers, modular arithmetic, congruences, the Chinese Remainder Theorem, Euler's theorem, and quadratic residues. The course then explores how these mathematical principles underpin cryptographic systems such as the RSA algorithm, Diffie-Hellman key exchange, and basic hash functions. Emphasis is placed on both theoretical understanding and computational techniques, and at the same time, the historical aspects and importance of the subject are also

emphasised. Applications to real-world cryptography and security are discussed, providing students with a strong foundation for further study in mathematics, computer science, and cybersecurity. The course presumes a familiarity with mathematics at the 10+2 level and will involve problem-solving as a core part of the lectures and assignments. This course is suitable for students interested in mathematics, computer science, and cybersecurity, providing essential tools for both theoretical and applied fields.

### **MAT256 - Differential Equations** **Credits: 3**

This course is one of the core requirements for the Bachelor's programmes in Economics and Physics. It may be taken for the GER for other disciplines. This course gives an introduction to differential equations for Undergraduates from all fields who know about Elementary and Intermediate Calculus (the contents of MAT142 and MAT146 would be enough for this course). The course covers topics useful for any undergraduate interested in using differential equations to model real-life situations. The course is problem-oriented and the theory is developed so that the student can solve problems more effectively.

### **MAT268 - Introduction to Mathematical Biology** **Credits: 3**

Biological processes typically take place in highly complex environments often involving nonlinear interactions between various participating molecules or species. Despite the complexity and the presence of thermal noise, biological processes are extremely robust. Although since past centuries scientists

have been attempting to find generalized principles that drive these processes, till date, our understanding is far from complete. Mathematical modelling of these complex processes often helps describe these processes precisely and reveal underlying general principles governing observed biological phenomena. The purpose of this course is to provide an exposure to the interaction between Mathematics and Biology at an undergraduate level. The course is appropriate for all students who are passionate about Mathematics and are also curious to learn how life functions at different levels, microscopic or macroscopic. This course would be equally relevant for Biology students who would benefit from gaining mathematical insights on their area of interest and also appreciate how mathematical modelling may help them design experiments in an informed manner. The course will involve building mathematical models based on the mechanism behind a given biological process. solving these models and connecting with what we observe in real life or in experiments. We will be primarily focusing on the following topics Population and disease models Molecular evolution Genetics Introduction to biological networks The details of the biological processes will be explained in the class at an elementary level. About Mathematical Preliminaries: Mathematical tools required to solve various models will be explained/worked out in the class along with examples and practice problems. Basic training in MATLAB along with preliminary assistance in writing small programmes will be provided in the class.

**MAT281 - Multivariable Calculus**  
**Credits: 3**

This is the first course in mathematics taken by all engineering students, BS (Physics) students and

anyone else who is interested in basic techniques of differential calculus of one and many variables. The course is highly applications oriented. Graphical visualization will be encouraged. Python code will be shared with interested students. The emphasis is on engineering and physics applications. The major topics covered are vectors, dot products, determinants, matrices, review of single variable calculus, continuity, differentiability, limits, Taylor and McLaurin series, convergence, partial derivatives, chain rules, extremum values, gradient, directional derivatives, Lagrange's multipliers  
 Integral Calculus: Double integrals, polar coordinates, change of variables, Line integrals in plane, conservative fields, Gradient fields and potential, Integral theorem for Gradients, Spherical and Cylindrical Polar coordinates, Divergence and Curl, Gauss's theorem and Stokes' theorem, Examples of triple integrals in polar coordinates

**MAT281 - Multivariable Calculus**  
**Credits: 4**

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coordinates, change of variables, Line integrals in plane, conservative fields, Gradient fields and potential, Integral theorem for Gradients, Spherical and Cylindrical Polar coordinates, Divergence and Curl, Gauss's theorem and Stokes' theorem, Examples of triple integrals in polar coordinates

**MAT305 - Mathematical Modeling**  
**Credits: 3**

This course introduces the modelling process of selected phenomena in biology, physics, economics, and engineering, focusing on learning and applying key mathematical and computational methods to solve such problems. The student investigates a specific area through case studies, analysis, and predictions to gain a deeper understanding of a given problem and learns to apply essential tools to find mathematical solutions. The course will involve case studies of problems from different disciplines and the student will use different mathematical and computational methods to study, analyse and make predictions related to the problem.

**MAT312 - Abstract Algebra**  
**Credits: 4**

The notion of a "group," viewed only 30 years ago as the epitome of sophistication, is today one of the mathematical concepts most widely used in physics, chemistry, biochemistry, and mathematics itself. – Alexey Sosinsky, 1991  
 This undergraduate course focuses on traditional algebra topics that have found greatest application in science and engineering as well as in mathematics. The power of abstract algebra is embedded in its name: it gives us an arena in which we may study disparate mathematical objects together and abstractly, without considering a particular instance or occurrence.

For example, the multiplication of numbers, symmetries of a molecule, dance formations, roots of polynomials, Australian kin systems, actions of a Rubik's cube, and loops on surfaces all form groups. The main objects of study, in this course, are groups, which are abstract mathematical objects that reflect the most basic features of many other mathematical constructions. We will also study fields and other abstract mathematical objects, which can be thought of as groups with additional structure. Topics include group theory, emphasising finite groups; field theory, including properties and applications of finite fields.

**MAT334 - Introductory Real Analysis**  
**Credits: 4**

Real Analysis is one of the foundational courses in Mathematics. It demonstrates the need for mathematical rigor in dealing with fundamental mathematical concepts, for example, the construction of real numbers, the concept of infinity, and the idea of a limit. Real Analysis is useful in many fields in mathematics, such as Complex Analysis, Functional Analysis, Harmonic Analysis (including Fourier Analysis), Approximation Theory, Numerical Analysis, Dynamical Systems, Wavelets, Nonlinear Optimization, Partial Differential Equations, etc. Real analysis (including Measure Theory) forms the foundation of modern Probability Theory and finds applications in Economics, Finance, Network Simulations, etc. For example, concepts of Real Analysis are used in Economics in Classical Demand Theory (for example, in studying the  $n$ -dimensional commodity space  $\mathbb{R}^n$ ), in Marginal Analysis and in problems involving Constrained Optimization (for example, in the Utility Maximization Problem). This course will provide a rigorous foundation for the concepts discussed in courses on Introductory

Calculus. The course will introduce rigorous Real Analysis at an elementary level and will cover the following main topics. •Well Ordering principle and the principle of Mathematical Induction •Countable and uncountable infinity •Formal construction of Real Numbers ( $\mathbb{R}$ ) •Properties of  $\mathbb{R}$  •Sequences •Series •Limits •Continuity •Differentiation •Riemann Integral

**MAT485 - Introduction to Quantum Computing**  
**Credits: 3**

Quantum computing is a rapidly emerging interdisciplinary field that draws from physics, mathematics, and computing. It has the potential to revolutionize many aspects of computation as we know it today. Indeed, it has already been theoretically proved that for many applications quantum algorithms would be exponentially efficient than classical algorithms. This means quantum computers will be able to solve many problems that are practically intractable for classical computers. For example, quantum computers would be able to break all the existing public-key cryptographic algorithms used in online banking transactions. This course will provide an introduction to the mathematical framework of quantum computing. The focus will be on understanding how quantum algorithms work, although we will briefly discuss the physical realization of quantum computers towards the end of the course. Several important quantum algorithms will be discussed. Topics covered include quantum logic gates, quantum algorithms including the Deutsch-Jozsa algorithm, Shor's factoring algorithm, Grover's search algorithm, and optical photon quantum computer.

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**MAT722 - Advanced Analysis II**  
**Credits: 3**

This course is a successor course to Advanced Analysis I and concentrates on studying Fubini's Theorem, the Radon-Nikodym theorem and Elements of Functional Analysis together with applications. The course is accessible to graduate students from various disciplines since each of these topics is studied first using  $\mathbb{R}^n$  with

Lebesgue measure and later extended to arbitrary measure spaces. The course concludes with an introduction to the Daniell Integral and develops the Haar integral as an application.

### **MAT730 - Combinatorial Representation Theory**

**Credits: 3**

Representation theory is a branch of pure mathematics that has seen a lot of applications in recent years. In this branch, abstract algebraic structures are represented using matrices or geometry, which enables them to be studied from a different lens. These representations provide a bridge between abstract mathematics and its explicit applications in nearly every branch of mathematics as well as in related fields such as physics and engineering. In Combinatorial Representation Theory, combinatorial objects are used to model these representations. Our goal is to ask questions about these combinatorial structures and to count (how many there are), enumerate (how to generate them all), and understand the representation theory behind them. The interplay between algebra and combinatorics is very handy and both branches help answer questions from the other branch. After a primer on abstract representation theory, we will work on understanding the representations of the symmetric group. This will lead us naturally to some celebrated combinatorial algorithms, in particular, we will give a full treatment of the Robinson-Schensted algorithm and Schutzenberger's Jeu de Taquin. Finally, we will use this background to understand the ring of symmetric functions from a combinatorial perspective.

### **MAT741 - Advanced Algebra II**

**Credits: 3**

This advanced algebra course is tailored for graduate students with a solid foundation in Abstract Algebra at the Master's level. Building upon the fundamental mathematical structures of groups, rings, and fields, this course delves into sophisticated concepts and their practical applications. Through this course, students will explore the elegant theory of Galois extensions, automorphisms, and the fundamental theorem of Galois theory. Additionally, the course covers Galois cohomology, providing insights into the structure of Galois groups and their extensions. The course investigates tensor products and their significance in algebraic structures. Topics include tensor products of modules over rings and algebras with applications.

### **MUS101 - Inside Indian Music**

**Credits: 3**

This course is taught by Prachi Vaidya-Dublay under the category PVA-GER. "What is Indian? What is Music?" Such questions intrigue us often. MUS101 tries to address these questions by exploring and interrogating the existing genres of Indian Music like Tribal-Folk, Classical-Art, Popular, Devotional and Fusion Music. It focuses on the key principles of music that formulate these genres and connect them to each other, the connection which eventually weaves the complex and diverse fabric called 'Indian Music'. The course also tries to understand the relationship of culture and music through the dynamics of above mentioned genres. This course combines Theory and Practice thus students are expected to perform some vocals and also do some research during the course.

### **MUS103 - Culturing the Voice**

**Credits: 3**

This course is taught by Prachi Vaidya-Dublay under the category PVA-GER. It specially is designed for aspiring Voice Professionals. It tries to explore the Idea of Voice on both physical and metaphorical levels. All those who wish to use their voice professionally in their respective fields and careers will find intensive practical sessions in Voice Culture Course useful, which will include Yoga-PraNayaam, Breathing Awareness Exercises and Special Training in Voice and Speech Building. Voice Acting and Story Telling are important segments of this course. Along with the Readings of English Play and Urdu Poetry Recitation, Readings in Hindi, Sanskrit and in some other regional languages also will be encouraged during this course. It may please be noted that this is primarily a Practical Course.

### **PER101 - Introduction to Persian I**

**Credits: 3**

This course is an introduction to Persian as a research language. It equips students with the skills necessary to read and write Persian at an elementary level. This course is the first in a two-part sequence and works through approximately half of W.M. Thackston's Introduction to Persian. Students will learn foundational grammatical forms, build essential vocabulary, and become comfortable reading and writing the Persian script. Alongside language learning, students will also be introduced to the rich cultural and literary heritage of the language. Students are expected to undertake daily practice outside of class for at least 30 minutes.

### **PER201 - Intermediate Scholastic Persian - I**

**Credits: 3**

This course is the first in a two-part sequence (followed by PER202) designed to initiate students into the discipline of reading Persian texts in their original form. Building on the foundational knowledge of Persian morphology and syntax gained in PER101 and PER102, students will now begin engaging with selections from classical and modern Persian prose and poetry. Readings will span multiple genres and will be selected in consultation with students to reflect a diversity of themes and literary styles. Class sessions will be centred on close reading and in-class translation, supported by secondary scholarly writings that provide historical, literary, and linguistic context. Periodic reviews of grammar will be integrated as needed. Students are expected to prepare translations in advance and contribute actively to class discussions. Regular practice and self-study outside of class are essential components of the learning process.

### **PHI175 - Is Philosophy Dead? Great Ideas Across Space and Time**

**Credits: 3**

Stephen Hawking famously declared in his 2010 work *The Grand Design* that ‘philosophy is dead’. This course takes as its starting point this very claim, and seeks to introduce students to great philosophical ideas – from across space and time. In order to do this, this course first introduces the meaning and practice of philosophy across various traditions – Western, Islamic, Indian, Chinese, Japanese and African – and then proceeds to consider a few pivotal philosophical problems and the varying responses found across these traditions. In doing so, the course not only presents students with some timeless philosophical concerns and their illustrious

responses through history but demonstrates also how distinct traditions have valued different solutions, and indeed different questions. The course thus considers Hawking’s claim of philosophy’s death by probing the question if philosophy can die. A caveat: it is of course impossible for any course to adequately cover all traditions or indeed all concerns and approaches of any specific tradition. This course too, aware of its own subjective confines, aims however at introducing philosophy as well as the different philosophical traditions, with the intention of encouraging students to take up further study of philosophical questions through other courses at the University focussing on individual traditions.

### **PHL310 - Religious Art of South Asia**

**Credits: 3**

This course takes an immersive approach to the study of the religious art of South Asia, from c. 2500 BCE to the present day. Course units will focus on the paintings, sculptures, and architecture of India, Pakistan, and Nepal. We will examine Jain, Buddhist, Hindu, and Muslim religious art, asking how these visual and material objects relate to religious texts and practices. While loosely chronological, the course is also structured around the collections at the L. D. Museum and monuments close to Ahmedabad, including Baroda Museum, Rani ki Vaav, the Sun Temple at Modhera, Hutheesing Jain Temple, Champaner, and Sidi Sayyid and Jama Masjids. Most months, we will spend two class meetings at the L. D. Museum. These class meetings, along with the readings and writing assignments, will allow us to address a host of questions pertinent to the study of religion and art in general: What is art? How can art be understood as “secular” or “religious”? How can religious imagery be used to construct regional and national identities or to

teach a philosophical doctrine? By examining the different ways in which various communities have used visual and material culture throughout a period of nearly 5,000 years, we can see more clearly the contingency of “religion” and “art” in specific contexts.

### **PHY112 - Electromagnetic Theory**

**Credits: 4**

Primarily aimed at Physics major students but can be of interest to students from other majors, especially engineering, with a sound preparation of Maths. Electromagnetic Theory course covers the basic principles of electromagnetism which includes experimental basis, electrostatics, magnetic fields of steady currents, electromotive force and electromagnetic induction, Maxwell's equations, propagation and radiation of electromagnetic waves, electric and magnetic properties of matter, and conservation laws.

### **PHY121 - Laboratory Physics – Mechanics**

**Credits: 3**

The Laboratory Physics - I course introduces students to the scientific methods for conducting Physics experiments, including the acquisition, analysis and physical interpretation of data. This course complements the Classical Mechanics course, where students are introduced to fundamental Physics concepts such as energy, momentum, force etc., by incorporating experiments which illustrate the concepts. In most instances students will be required to build the necessary equipment on a very limited budget to perform the experiment. Scientific documentation of each experiment and the findings with an oral presentation and viva is required.

### **PHY212 - Oscillations, Waves and Optics**

**Credits: 3**

This course is a core course of the BS (Honours) in Physics Programme and is primarily for students majoring in Physics but can be of interest to students from other majors, particularly those related to engineering. The course covers broad areas like the simple, damped and forced harmonic oscillator, coupled oscillators, Fourier analysis, sound and electromagnetic waves and their properties and propagation in different media, geometrical optics, diffraction, interference and polarisation of light, and Maxwell's equations.

**PHY230 - Introductory Astronomy****Credits: 3**

Astronomy is one of the ancient areas of science like Medicine and Mathematics, and it has played a significant role in the society over several centuries. Even today, the human race is trying to understand fundamental questions pertaining to their existence in this tiny little planet suspended in this cosmos, and grapple with major questions like how did objects like galaxies, stars, and planets form? what are the contents of the Universe?. The Introductory Astronomy course provides an overview of the objects in the sky, and makes students familiar with the foundations of the field, the scale of the Universe, the night sky, planetary motions, celestial positions and time, techniques of observation involving Telescopes. It gives insights of our planetary system and its objects, in particular the Sun, Moon and Earth. Moving onwards the course then explores the stars, including types of stars, the interstellar medium, and stellar evolution. The course unravels the science involving the birth, evolution, and death of celestial bodies, through hands-on activities using real astronomical data.

The course explores larger distance scales with topics related to Galaxies and Dark matter. Finally, topics in Cosmology related to the expansion of the Universe and Hubble's law are explored.

**PHY310 - Quantum Mechanics I****Credits: 4**

This is a core course of the BS (Honours) major in Physics programme and is primarily aimed at Physics major students but can be of interest to students from other majors e.g, Computer Science and Engineering. Quantum Mechanics is probably the most profound scientific development in modern times. Its development and advancement has revolutionised human activities. Be it the electronic instruments we use today, be it the development of solar cells as a renewable source of energy, be it the spectroscopy that we need for any biological or chemical discoveries, there is hardly any sphere of activities that does not need quantum mechanics. In this course the students will be exposed to this subject which involves the most dramatic departure from our understanding of the macroscopic world at the microscopic scales. Students will be introduced the probabilistic concepts in studying the microscopic world which involves both new theoretical developments as well as rigorous mathematical concepts from linear algebra, differential equations and many more. In Quantum Mechanics I, to start with, the failure of classical physics in the microscopic world will be discussed in terms of some very important experiments. Subsequently the idea of quantum mechanics will be introduced. Finally few simple quantum mechanical systems will be introduced and related mathematical concepts will be taught.

**PHY313 - Thermodynamics****Credits: 4**

This is a core course primarily aimed at Physics major students but can be of interest to students from other majors. The course will mostly focus on equilibrium thermodynamics. The laws of thermodynamics will be introduced through a few fundamental postulates. Along with these, the concepts of temperature, internal energy, entropy and various thermodynamic potentials will be introduced. These concepts will be applied to understand expansion of gases, heat engines/refrigerators and phase transitions of different types.

**PHY635 - Introduction to Plasma Physics****Credits: 3**

This course covers the fundamentals about the plasma physics, which includes logical framework of Plasma physics, quasi-neutrality, Debye shielding, collision process, plasma transport phenomena, sheath theory, motion of single Plasma particle, adiabatic and non-adiabatic motion, elementary plasma waves, cold Plasma wave in a magnetized Plasma.

**PHY701 - Mathematical Methods for Physics****Credits: 3**

This course introduces students to advanced mathematical methods used to solve problems in Physics. It covers various topics including tensor analysis, complex variables and integration, special functions, integral transforms, Green's function and group theory.

**PHY731 - Atmospheric Physics****Credits: 3**

This is an elective course for PhD programme in

Physics. The course aims at introducing the Earth Atmosphere and its various components, their role in the Earth-Atmosphere system, and vertical profiles. Further, the course covers the concept of atmospheric boundary layer, its evolution and dynamics. Various types of atmospheric circulations and their underlying physics is discussed. Connecting the atmospheric components, dynamics, and circulation the course covers aspects of Earth-Atmosphere system and its radiation budget.

**PHY797 - Research Project – I**  
**Credits: 3**

**PHY798 - Research Project - II**  
**Credits: 3**

PhD Physics Research Project - II

**PSY101 - Introduction to Psychology**  
**Credits: 3**

The purpose of this course is to introduce students to the fundamental principles of the field of Psychology and provide insights into the inner workings of human behavior and mental processes. The course will start with the introduction of psychology as an empirical science and then it will move through the introduction of five main pillars of psychology; biological, cognitive, developmental, social/personality, and mental/physical health. Throughout the course, relevance and applicability of psychology in everyday life will be discussed.

**PSY161 - Personality and Individual Differences**  
**Credits: 3**

This course provides an overview and introduction to the broad field of personality psychology.

**PSY205 - Evolutionary Psychology**  
**Credits: 3**

Evolutionary Psychology is an elective course for BA Psychology major and is mainly (but not exclusively) aimed at BA Psychology students. Also, students from any undergraduate program who are interested in the evolutionary basis of human mind can opt for this course. Evolutionary Psychology is the theoretical (as well as the empirical) approach that views the human mind through the lens of biological evolution (by natural selection). This course discusses various psychological processes — particularly, those concerning survival, reproduction, kinship, and group living — that resulted as the products of evolutionary adaptation. Though the primary objective of this course is to introduce the evolved psychological processes, the course will also cover various theoretical assumptions as well as the empirical observations of the evolutionary approach to human behaviour. Throughout the course, the relevance and the practical applications of evolutionary psychology (in everyday life) will be discussed.

**PSY210 - Cognitive Psychology**  
**Credits: 3**

Cognitive Psychology is a core course for BA Psychology major students, largely targeted for the second year BA Psychology students. Cognitive Psychology is the scientific study of how humans store and process information in the mind/brain. This course will provide an understanding of various mental

processes involved in the generation of thought and behavior, such as cognitive mechanisms of attention, perception, memory, decision making, thinking, problem-solving, and emotion. Though the primary objective of this course is to introduce the scientific study of mind, the course will also cover various experimental methods and tools that are used to understand human cognition and the emerging trends in cognitive psychology. Throughout the course, relevance and application of cognitive psychology in everyday life will be discussed.

**PSY215 - Developmental Psychology**  
**Credits: 3**

Developmental Psychology is the scientific study of changes and continuity during the course of the lifespan, with the objective of understanding how human beings evolve from a single cell to become mature individuals and advance towards old age and the end of life. In this endeavour, the cultural context is of crucial importance on account of the social, historical, and ecological distinctiveness of human experiences. Developmental Psychology also takes an integrative perspective on domains of activity like physical and motor, social relationships, emotions, cognition, language, morality and emotional, cognition and language, emotional aspects and moral dimensions. Furthermore, the study of development is contextually embedded in family, schools, peer groups, neighbourhoods and society, looking both at normative as well as idiographic patterns. Issues of developmental difference and disability will also be addressed with focus on developmentally and culturally appropriate interventions.

**PSY280 - Abnormal Psychology**  
**Credits: 3**

This course is intended to provide students an overview of the field of Clinical Psychology and will cover the basics of psycho-pathology, psycho-diagnostics and psycho-therapeutics. The course goes into details regarding the history of the science, as well as contemporary domains of Clinical Psychology such as Forensic Psychology and Neuro Psychology. Students will also be introduced to the wide spectrum of various psychological disorders with origins in childhood (ADHD, Autism) to the disorders commonly found in the geriatric population such as Dementia. The students will be briefed regarding the various assessment and psychotherapeutic strategies used by clinical psychologists in their daily practice. By the end of the course, students will have a basic understanding of the range of psychological disorders, assessment and psychotherapeutic services that clinical psychologists provide to clients.

**PSY310 - Lab in Psychology**  
**Credits: 3**

The course trains students to perform laboratory-based experiments to study human behaviour. The course deals with experimental techniques required to study perceptual, cognitive and social psychological processes. The emphasis is on providing students with hands-on experience in conceiving, designing, executing and interpreting psychological experiments. The course aims to help students to apply their conceptual knowledge in psychological processes into creating novel experiments. The course offers hands-on training in experimentation on human participants. The theoretical principles and paradigmatic fundamentals associated with each experimental technique are also discussed during the session. The course focuses on five psychological

processes, and students will learn to replicate recent experiments that probe these processes.

**PSY312 - Cognitive Neuroscience**  
**Credits: 3**

Cognitive Neuroscience is the study of brain's role in cognitive functions. Drawing on concepts from psychology, neuroscience, and computational modeling, the students will explore how cognition emerges from neuronal activity. The course will cover concepts such as perception, attention, memory, language, decision making and consciousness. Although the primary focus is on understanding brain-behavior relationships, the course will also cover experimental (Behavioral tasks, invasive, non-invasive recordings) & analytical methods (data analysis, computational/mathematical modeling) required to study this relationship. Exciting new discoveries & their applications will be discussed throughout the course. This course is targeted for 3rd and 4th year students pursuing majors in psychology/biology. The course is interdisciplinary in nature and introduces the analytical techniques necessary to understand brain's role in cognitive functions. Foundational level mathematics/statistics and biology are pre-requisites for this course.

**PSY321 - Sensation and Perception**  
**Credits: 3**

Our senses continuously engage with the environment and enable us to behave adaptively. How does our brain organise and interpret this sensory information? The course will explore this question of how phenomenal experience emerges from the physical stimulation of senses by light, sound, pressure and chemicals in the environment. We have specialised systems to process diverse

forms of sensory information. The stimulation by light activates the visual system, and sound engages the auditory system, and so on. The course will track the entire process of perception, from the stimulation of the sensory receptors to the emergence of conscious experience. Students will learn the fundamentals of sensory transduction, neural coding of sensory information, and higher-order processes responsible for assimilating and interpreting sensory information. The students will then use this knowledge to read and reflect on research in the field of perception as well as use the conceptual knowledge towards tangible outcomes. The course will draw ideas from psychophysics, neuroscience, artificial intelligence and philosophy on perceiving the world around us.

**PSY350 - Counselling Psychology**  
**Credits: 3**

Counselling psychology is offered as a major elective course for students who intend to major in Psychology. It is designed to provide the student with an overview of counseling psychology as a profession. The course primarily focuses on orienting the student towards the fundamental skills, theoretical approaches to counseling and its applications across various settings. The course also intends to foster the understanding of the significance of personal awareness in the effective and ethical application of counseling skills. This course explores the basics of counselling, counselling process, and the different method and techniques in classical and contemporary therapies. We will examine the major schools of therapies: Psychoanalytic, Humanistic, Behavioural, Cognitive and Eclectic therapies with the aim of developing a sound theoretical background in psychotherapies. Along

with discussing the various theories of psychotherapy, this course offers an understanding in application of counseling skills across different fields like family and couple counseling, and career counseling, etc. The intensive focus of course will be on the development of individual counseling skills through readings, group discussions, reviews of videotaped interviews and other experiential exercises.

**PSY705 - History and Systems of Psychology**  
**Credits: 3**

History and systems of Psychology is intended to be a core course for doctoral students. It discusses the historical, social, and psychological influences involved in psychology's academic and clinical practices. It discusses the cognitive processes involved in theory formation, the role of personality (and individual differences) in the development of psychologists' scientific interests, and social and ideological factors' influences on psychologists' intellectual and academic activities. It also discusses practical applications of the history and psychology of Psychology, such as demarking and avoiding pseudoscientific views and suggestions to improve the validity of scientific findings. By examining the historical, social, and psychological forces that shape scientific inquiry, the student will gain valuable insights into knowledge creation and become a more informed and critical consumer of scientific information in Psychology.

**PSY796 - Individual Study- Trauma and Psychotherapy**  
**Credits: 3**

This course provides a comprehensive examination of trauma and its influence on mental

health, emphasizing psychotherapeutic techniques. The course aims to explore the physical, psychological, and societal aspects of trauma and its impact on brain function and behaviour. It also encompasses Trauma-Informed Care strategies. By utilizing case studies, on-site experiences, and discussions, students will cultivate tangible skills for evaluating trauma and administering successful treatment, all while recognizing the significance of self-care in trauma-related engagements.

**PSY796 - Individual Study - Affective states and Attentional Control**  
**Credits: 3**

This course explores the intricate relationship between affective states (moods and emotions) and attentional control processes. Drawing from empirical studies in psychology and neuroscience, the course delves into how positive and negative emotions influence spatial and temporal attention, visual search, emotion-induced blindness, and brain mechanisms. Emphasis is placed on understanding top-down and bottom-up modulation of attention by emotional states and their neural correlates.

**PSY796 - Individual Study - Research Approaches to Yoga Psychology**  
**Credits: 3**

This course aims to introduce the student to Yoga Psychology, based on three epistemic sources: (A) Selected sūtras of Patañjali's Yoga Sūtras and its key commentaries, (B) Three field visits to the contemporary schools of yoga, and (C) A review of a century of published research. Through a comprehensive overview of primary texts, surrounding commentaries, and psychological research, the student will examine the research

approaches and methods, conceptualization of yogic concepts as well as application of Yoga Psychology in contemporary Psychology. This course examines Yoga Psychology from multiple perspectives (philosophical, psychological, and applied) to train the student in applied empirical work.

**PVA100 - Fundamentals of Theatre and Theatricality**  
**Credits: 3**

The Fundamentals of Theatre and Theatricality is an entry-level practice-based in-studio course which has been designed as a Core course in the Performing Art Pathway for the first semester PVA students and is additionally open to all students interested in a hands-on introduction to theatre and theatre-making practice. This course aims to introduce undergraduate level students to the basic concepts of theatre-making in the contemporary milieu. The course is conceptually built around three key frameworks— Meaning Making, Non-Hierarchy and Learning through Practice. These frameworks will be imparted through all structured practical sessions, student led discussions and class presentations conducted throughout the course. The sessions will introduce and expand upon three key elements of Theatre— Text, Body and Space. The course will focus on cultivating theatrical sensibilities in a novice student of theatre and on enhancing basic critical reflective skills involved in analysing and creating theatre performances. Students will develop a comprehensive understanding of theatre as a form where various elements like actor, stage, sound, objects and text come together in a designated space and time. The students will be encouraged to collaborate with their peers in order to understand the value and function of 'interaction' as the fundamental quality of theatre as an art

form.

**PVA102 - Exploring the Black Box**  
**Credits: 3**

This is an entry level Core Course for the Integrated Arts Programme. It is an introduction to Integrated Arts approaches found within Black Box theatre practice. This course is for students interested in Integrated Arts, Theatre, Performance-based practice and research. It aims to build skills and sensibilities in a range of visual and performance-oriented arts through hands-on introduction to the properties and functions of the Black Box. The PRACTICE sessions include: (a) ideation and production of a multi-medial performance based work; (b) construction and conceptualisation of a performance narrative; (c) introduction to a range of multi-medial artistic practices that intervenes in theatre-making and research practice. (d) Use of theatre and visual art based tools, concepts and methods to document the city. The city will be the main thematic around which art works will be developed in this course. The LECTURE sessions will help (a) contextualise the diverse artistic practices addressed; (b) integrate these learnings with the historical context of theatre-making practices in general and with the thematic context of the city in particular; (c) develop a comprehensive understanding of what is meant by the Integrated Arts as exemplified in Black Box theatre.

**PVA112 - Fundamentals of Drawing**  
**Credits: 3**

This course will focus on the fundamentals of drawing while emphasising its role in the act of mark-making as a primal instinct of human beings. While drawing is often seen as a primary tool supporting creative research within art

practice, this course will also consider drawing as an independent and intimate approach that offers a keen insight to both the creative process and one's emotional state. To that end, it is a studio-practice course aided by strong contextual studies that will enable students to develop basic rendering skills, understand drawing as a form of action and gesture that is an affirmation of life. Students will be able to objectively perceive the world we live in, which forms the crux of art-making in any art form – including printmaking, photography, painting, and digital art. The studio sessions will be spent making drawings using representational, abstract, and non-representational approaches. There will be ongoing guidance and critique of works-in-progress, and discussions of finished works, which will touch upon concepts crucial to the creative process, including emphasis on hand-eye coordination, critical thinking, and spontaneity. This will also be supplemented with museum and gallery visits in the Ahmedabad city. Sketchbooks will be an important component in this course; students will explore self-expression and alternative drawing methods as a part of their required initiative. Students will complete this course with a strong understanding of what constitutes as drawing, and also develop technical skill and competency in the drawing process. The goal of this course is to perceive action and gesture as means to create art while also laying a strong foundation for anyone who wants to pursue other forms of art.

**PVA123 - Fundamentals of Painting**  
**Credits: 3**

This course is designed for beginners and those who have minimal painting experience. Students will learn the fundamentals of the painting process while exploring different mediums including

acrylic, water colour, and oil, and also paper, canvas, and panels as support. Though this course is intended as an introduction to the methods, materials, and techniques associated with painting, discussions of art history will establish a context for understanding the discipline of painting more fully.

This course is also an introduction to objective observation of the world as we see it - not as we think we see it and rendering that view in artwork. Beginning with basic principles of painting, this course will continue to challenge and build students' skill as a painter through representational, abstract, and non-representational style of painting. Among other traditional subject matters including still life, landscapes and cityscapes, our exploration may even include renderings of machines and biological specimens. Studio sessions will be majorly spent making paintings, which will touch upon concepts crucial to the creative process, including critical thinking, discipline, and spontaneity. Students will complete this course with a basic but strong understanding of making paintings, and also develop competency, both visual and technical, involved in painting. The goal of this course is to give students the basic tools and ideas necessary to begin their own personal painting practice along with finding a means for self-expression through the medium of painting.

**PVA126 - Scenic Design for Theatre**  
**Credits: 3**

The course will be taught by theatre artist Dushyant Malik. This is a supplementary course which is designed to enhance the learnings of parent subjects – design and art, largely. More specifically, students interested in theatre, literature, designing and parallel creative fields,

would benefit. The course falls at the intersection of theatre and designing. Scenic design would teach scene design specific to theatre. The course has been structured to have a holistic approach to the idea of creation and design. Focus would remain heavy on learning the 'process' that one must go through to create; building a base, a backstory, researching, rejecting and revisiting during the process of ideation. Following is the breakdown of how the course is structured: - Movement and composition in acting - Acting and Space design - Creating images from text - Light design - Set design - Sound and music - 3D mapping as new technology - Design principles in scenography - Types of theatres and theatre architecture <sup>[1]</sup><sub>[SEP]</sub>

**PVA127 - Street Theatre: Raise the Voice**  
**Credits: 3**

Street theatre is a form of performing art that takes place in public spaces, such as streets, parks, or squares. It often involves theatrical performances that address social or political issues, using creative and interactive techniques to engage with the audience. Street theatre is theatre which goes to the people and performed among them, and has potential to create significant awareness about critical issues of society. The aim of this course is to make aware students about social issues around them that need to be addressed, and present it in a creative and effective way in front of concerned group of people. Students - often described as engine of change for any society - will learn to produce their street theatre performances while also understanding its legacy through the history of art. The course will also make student aware and conscious of the society and environment they live in, while also focussing on important and relevant socio-political issues that affect them.

**PVA130 - Fundamentals of Photography**  
**Credits: 3**

This course is designed for beginners with an interest in photography. In this course, students will study light and shadow, learn how to use a digital camera along with the technical know-how of camera systems, understand composition and its applications for making compelling photographic images. With practice in and outside classroom, students are expected to create portraiture, still life and landscape images.

**PVA171 - Theatre and Society**  
**Credits: 3**

Theatre has evolved through time as an important tool of expression and communication. It is not only a source of entertainment but can serve as a catalyst for social reform or development. Theatre also expands our connection to the larger world around us, and our empathy for lives lived differently from our own. A director or an actor thinks from the perspective of the diverse characters they portray, improving tolerance towards others in the society. The audience, in turn, becomes witness to worlds that they might otherwise not encounter or be familiar with. Studies have also shown that students who participate in theatre perform better in academics as it enhances their power to express themselves. This course aims to introduce students to the different forms and functions of theatre, inclusive of the wide range of roles theatre practitioners can take on, such as directing, acting and scriptwriting. We will also simultaneously discuss how theatre relates to societal concerns, using theatre games to help students to find present day issues that are relevant to them. Importantly, we will work together on producing skits and script writing in peer groups to

encourage students to work cohesively in groups, overcome their inhibitions and find the confidence to engage in creative self-expression. This course is at beginner level & doesn't require prior theatre experience. It is open to all students at the University. It will run for one session a week (for 3 hours) as in a lab course. It is offered by Kabir Thakore, the Director of the Scrapyard Theatre in Ahmedabad.

**PVA181 - Music and Society**  
**Credits: 3**

This course invites students to reflect on the many significances and functions of music in contemporary societies. From personalized playlists to public concerts to national anthems, music is an integral part of human social life today. It sways our emotions in numerous manners, contributes to the shaping of identities, offers sources of livelihood to many, and provides a soundtrack for everyday activities. Drawing upon academic and popular readings as well as audio-visual sources, we will explore musical examples from diverse locations, cultures and historical moments across the globe. The course will lend a keen ear to how music mediates aspects of social life pertaining, in particular, to: identity, pleasure, technology, economics, politics, and faith

**PVA200 - Soundscapes**  
**Credits: 3**

This course is primarily designed as a Major Core course for the Integrated Arts Programme. It is additionally open to all students interested in an introduction to the theory and practice of sound and the musical arts. Soundscapes is an entry level course that introduces the student to the interdisciplinary and fermenting field of sound

studies and the sonic arts by unpacking the concept and form of soundscapes. This course focusses on sensitising our capacities to tune into the world while cultivating an understanding of the many significant ways in which practices of listening, vocalising and sound-making intervene in our experience and perception of the world. Specifically, this course (1) provides an overview of diverse perspectives on how 'soundscapes' have been conceptualised historically (2) imparts basic level recording, sound-editing and sound-composition skills (3) offers a practical and conceptual toolkit with which to construct, listen to and analyse soundscapes.

**PVA203 - Art, Culture and Heritage in a Globalized India.**  
**Credits: 3**

This course is intended for students who want to understand the areas of art, culture and heritage in India conceptually as well as through the various forms in which we encounter them in the world around us. The course has two purposes: One, it aims to acquaint students with selected forms and practices in the Indian subcontinent, especially those identified as heritage (e.g. classical and folk performing arts, crafts, material culture, etc.) and as modern and contemporary art (e.g. painting, installation art, etc.). Two, it encourages students to look critically at the categories of art, culture and heritage, and examine how they intersect with national/regional/global politics, cultural institutions, livelihoods, markets, legal regimes, etc. In addition, this course will offer students a hands-on opportunity to develop skills centered on communication about art, culture and heritage.

**RES101 - Introduction to Research Methodology**  
**Credits: 4**

This course introduces students to one of the ways in which we acquire knowledge about the world—Doing Research. Research is an attempt to understand the world through systematic study—that is, through identification of a problem, question, or hypothesis; selection of methods to investigate the question, collecting data, interpreting data, and reporting findings. It also introduces students the statistical framework of R. This introductory and project-based course will familiarize students with the philosophical underpinnings of research; enable them to identify, compare and contrast different qualitative and quantitative research methods suitable for answering a question; apply their understanding to design a small quantitative research project, as well as conducting participant observation and conducting qualitative coding.

**RES770 - Research Writing & Critical Thinking across the Disciplines**  
**Credits: 3**

Critical thinking and good writing are fundamental life skills that are especially important for students if they wish to excel in their chosen fields and enjoy productive and rewarding careers in increasingly competitive publish-or-perish environments both within academia and without. Wiended properly, good writing hones critical thinking skills, inculcates discipline and a work ethic, and improves interpersonal and collaborative skills. This course is aimed at developing these skills by getting students involved in and working on a sustained writing project over the course of the semester. Based on the conviction that excellent thinkers and writers, must first and foremost be good and critical readers who can extract information from the written word and deploy it for multiple purposes,

this course uses the genre of the book review as the whetstone on which students will sharpen both their thinking and communication skills. Students will not only read and review a book relevant to their field of study and broader interests, they will also, if the book is appropriate, get a chance to publish their book review in an academic journal or website.

**SAN101 - Learning Sanskrit Through Sanskrit Literature: Elementary**  
**Credits: 3**

This course is the first of a set of two courses where students will learn scholastic Sanskrit through exercises drawn from various Sanskrit literary sources, such as well-known subhāṣitas, Pañcatantra, Vālmīki Rāmāyaṇa, etc. In this course, students will be introduced gradually to various aspects of Sanskrit morphology and syntax so as to enable them to read simple Sanskrit sentences and verses. Exercises (sentences, verses and passages) for each class will be drawn from original Sanskrit works (brief description below), and will be chosen so as to exemplify the key grammatical features which need to be explained. The Pañcatantra is a famous collection of Sanskrit stories, in verse and prose, dated to around the second/third century CE and is considered a nītiśāstra (a treatise on government or political science). The Vālmīki Rāmāyaṇa is one of the two famous Indian epics, a mammoth work comprising nearly 24,000 verses and which is of monumental importance and legacy. Each class will be divided into three segments: a revision of the past lesson(s) (and review of assigned after-class exercises), the scheduled lesson, and in-class exercises taken from Sanskrit literature. This course will prepare students to take the second of this set of courses (SAN102), wherein students will study more advanced syntactical aspects of

the language. These two courses will prepare students with the adequate training in Sanskrit grammar to begin their study of original Sanskrit works in their second year of Sanskrit study (SAN201 and SAN202). Knowledge of the Devanāgarī script is not a prerequisite for this course. This is a core course for the Minor in Sanskrit Studies. Note: This course introduces students to Sanskrit as a classical language, and therefore, all evaluation during this course (class tests, mid-semester examination and end-semester examination) will be entirely open-book. Students are not expected to learn any tables, etc. by rote.

**SAN201 - Reading Sanskrit Scholastic Texts: Elementary**  
**Credits: 3**

This course is the first of a set of two courses (the other being SAN202) that initiates students into the discipline of reading original Sanskrit texts. Students have been introduced to the intricacies of Sanskrit morphology and syntax in SAN101 and SAN102, and will now begin their journey into classical Sanskrit poetry and prose. We will read one/two famous episodes from any of the three vastly influential texts - Mahābhārata, Pañcatantra, and Vālmīki Rāmāyaṇa. Students will also be introduced to Sanskrit commentaries and their role in the textual interpretation. We will also consider some English translations of these works and compare them to the original Sanskrit text, understanding thereby the inevitable gap in any work of translation (and the intellectual joy therefore in being able to read the original!).

**SPS102 - Identity, Inequality and Difference**  
**Credits: 4**

The course invites students to critically examine 1) the ways in which we present ourselves to

social audiences and are ascribed identities around gender & sexuality, class, caste, and tribe/ethnicity 2) how differences in social identification become expectations of appropriate behavior and how these codes of conduct are perceived, negotiated, subverted and mobilized in diverse contexts and 3) hierarchies that cohere around difference. The course will largely focus on contemporary forms of social identification but present them as historically and culturally situated, and mediated by global flows. In particular, we will consider the contradictory effects of new technologies and markets for contemporary forms of social identification and inequality, and the utility of difference for accruing cultural capital in a market economy. Course content is drawn from a range of academic fields of inquiry including anthropology, sociology, literature and cultural studies.

**SPS103 - Politics in Independent India**  
**Credits: 3**

This course is a basic introductory course for understanding how politics has shaped and evolved in Independent India. Similar in spirit to the basic introductory political science courses at the undergraduate level in India, this course provides a descriptive overview of the formation and functioning of Indian state by looking at institutional dynamics of various public institutions since independence. The course will also help students to understand the evolution of Indian politics since 1947 by examining changes in social movements and interest groups and the myriad ways in which their demands are channeled by political parties and the Indian state. Through this course, students will also develop an appreciation for the historical roots of contemporary political developments like: changing party systems, rise of Hindu

nationalism, and agrarian crisis in 21st Century among others.

**SPS202 - Family, Community, Nation**  
**Credits: 3**

In this course, we will critically examine entities such as family, caste, class, community, language and nation, and ask how they generate powerful and sometimes conflicting loyalties among individuals. Are such associations natural and primordial, or contingent and historical? Do they have an economic rationale? How do the actions of state, law, and civil society mediate these attachments? Over the course of 5 units— Family, Caste, Religion, Language, and Nation— this course we will address specific questions such as: What is the history of the family as a unit? How did ideas such as the father as the head of the family, or the heterosexual couple as its anchors, come to be taken for granted? What is the social significance of marriage and how do we critically examine its current glossy, romanticized reinventions as elaborately staged spectacles? What is the significance of caste in our lives, and what is its place in Indian society? How does the Indian Constitution view caste? What is the relationship of religion to the state? Should it be private and contained within families, or spill over into streets and processions? Why have religious minorities, Dalits, and other groups at the ‘margin’ consistently challenged the idea of nationalism? This course builds on the understanding of the production of social identities in the introductory courses of the Social and Political Sciences programme and aims to develop a stronger theoretical foundation for analyzing key social categories. In this course, students will engage with a selection of texts focusing on categorizations along the lines of gender, family, caste, religion, language, and

nation. Students will learn to critically examine these categories, their inter-connections, and the processes through which they are reproduced in everyday life.

### **SPS250 - International Relations Theory**

**Credits: 3**

This course serves as a beginner-level introduction to International Relations Theory. It explores the main debates and theories of international relations and covers a selection of both mainstream and critical perspectives. The modules are designed to familiarise students with the most widely used terminologies within the field and the works of some of the most well-known scholars in the discipline. The case study accompanying each theory aims to bridge the gap between theoretical frameworks and real-world application, thus illustrating the interconnectedness of “IR as theory” and “IR in practice”. Additionally, particular attention is devoted to the study of IR in India. While housed in the School of Arts and Sciences, this course is designed to be accessible and appealing to anyone with an interest in understanding and appreciating the complexities of global political dynamics.

### **SPS255 - Introduction to Comparative Politics**

**Credits: 3**

This course will serve as a major elective for the Social and Political Sciences (SPS) major and as a free elective or General Education Requirements (GER) for students from across the university. The purpose of this course is twofold: First, for you to master a certain set of conceptual tools and basic knowledge about comparative politics. Second, for you to formulate your own arguments about issues related to comparative politics, making use of these analytical tools and

knowledge to develop and present your ideas. Hence, analytical thinking including creative and critical thinking is the most important ability which will be fully developed throughout this course. Yet, no prior knowledge on the subject is assumed nor required. The purpose of this class is to foster you to become a politically literate fledged graduate by highlighting diverse philosophic foundations of comparative politics and introducing broad and alternative methods of inquiring the study of comparative politics. Comprehension and willingness to learn basic political science approaches are needed.

SPS261 - Government Secrecy and Intelligence Studies Credits: 3

This enabling course will serve as a major elective for the Social and Political Sciences (SPS) major and as a free elective or General Education Requirement (GER) for students from across the university. Secrecy is itself the art and science of our political life, yet little enough is known about government secrecy and intelligence studies among ordinary citizens as well as scholars. Promoters of intelligence and government secrecy – usually those who are in power – have emphasized its important role for our society to function orderly, because the ends justify the means. On the other hand, guardians of a civil society – usually the ruled in a democracy, such as citizens, mass media and human rights activists – have exclaimed that power has been in abuse. Even those who are apathetic or indifferent among ordinary people with politics, become awakened by the political impact that secrecy has once it is revealed as scandals. We have no way of gauging the relevant successful cases of secret statecraft and government secrecy in general since we know very little about the whole cases of national leaders’ covert attempts to engage in government secrecy. As a result, we cannot be even certain whether cases of revelation are typical or atypical,

or whether revelations were a result of government secrecy failures to reassure or other factors. Empirical evidence to prove or disprove government secrecy theories, thus, could be more speculative by necessity, but it is possible to test some theories with the limited information that can be gleaned from historical records and in social science manners, such as hypothetical deductive approaches. Therefore, through this course on intelligence and government secrecy, undergraduate students will ask themselves what secrecy is in the first place and what are the possible future challenges pertinent we have to face. Furthermore, since intelligence and government secrecy studies pose many ethical and moral questions – for example, “Is secrecy itself necessary in intelligence?” “If so, how much secrecy do we need? And at what cost?” – this course challenges undergraduate students to face these very fundamental questions. Although these are tough questions to answer, they are worthwhile to look into. Additionally, technologies and intelligence tools change over time, so another question is, what legitimizes various types of intelligence collection activities like the eavesdropping of by? National Security Agency? How far does the government’s responsibility go and should go? These questions will prepare students for actual government jobs which social and political science major students, and any students, are mostly pursuing. The course on intelligence and government secrecy is an intellectual journey that prepares undergraduate students to real-world politics where their survival skills are required and their innovative thoughts and ideas are needed.

### **SPS263 - Climate Change and Society**

**Credits: 3**

How is climate change making us rethink how we

do politics, how we present science, how we practice ethics towards non-humans, and how we understand human history? This course is an elective in the Social and Political Sciences Major. It will be of interest to any student in the university who wishes to develop a qualitative, social and political perspective on climate change. It will broadly help students analyse how the phenomenon of climate change is impacted by and in turn impacts socio-cultural conditions. Thus, on one end, top-down, using political theory, we will analyse global governmental action on climate change. On the other end, bottom-up, we will use sociology/anthropology, to study how different communities use their traditional knowledge to adapt to climate change. From a climate justice perspective, we will ask why and how is it that marginalized groups across the world disproportionately bear both the impact of environmental degradation and the burden of remedial measures to avert the climate crisis. We will read case studies on a variety of climate related issues such as: on air-pollution in Delhi, on the inadequacies of our high school climate education, on how communities recover from climate disasters in Asia and in the US, and on how villagers co-exist with bears in Uttarakhand. Classes will combine texts with discussions, films, lectures and student projects both within and outside the classroom. At the end of the course, as students conceptualize for themselves what effective climate action should look like, the course will give them the tools to both critique the current economic and political measures being taken, and to appreciate the complexity of such interventions.

**SPS266 - India and the South Asian Matrix**  
**Credits: 1.5**

This is an intermediate level interdisciplinary

course on key aspects of geopolitics and geo-economics in South Asia, among the most populous, strategically situated, and dynamic regions in the world in which India is a regional pivot. While the course, taught from a practitioner's perspective, will focus on 21st century developments and prospects, it will be rooted in the evolution of India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan, and the Maldives since the departure of colonial powers from the Subcontinent, and the ensuing inter-relationships of conflict and conflict resolution. The course will discuss various regional initiatives such as SAARC (South Asian Association for Regional Cooperation); the BBIN (Bangladesh, Bhutan, India, Nepal) transport connectivity initiative; regional initiatives in energy, water sharing, and climate crisis mitigation; and trans-regional economic initiatives like BIMSTEC which also includes Myanmar and Thailand. The course will discuss the over-arching presence and influence of China, Myanmar and Afghanistan (a member of SAARC), with which South Asia shares vast borders. These regional neighbours are also active ingredients in South Asian outcomes in a range from security to migration, and, along with core South Asian countries, are increasingly a part of Superpower, or 'Super-Complex,' dynamics. This course will also discuss South Asia by looking beyond an Indian pivot to present the perspectives of other South Asian countries. And, conclusively, the course will discuss how the countries of South Asia can work to evolve a future of shared peace and prosperity.

**SPS300 - Qualitative Research Methods**  
**Credits: 4**

What research methods do social scientists use to understand phenomena such as human

experiences, processes, events, relations and networks? What does 'fieldwork' entail, and how do researchers define and construct a field? How do social scientists establish the validity, rigour and verifiability of their research questions and hypothesis, while remaining open to the inherently unstable nature of social relations? This course introduces students to research methods in the social sciences through a combination of reading, discussion and fieldwork practice. Alongside tracing some of the key debates that have arisen in qualitative social science methodology, students will learn about new and evolving modes of virtual qualitative field work such as navigating digital and remote sites of research students and the ethics and power dynamics implicit in conducting qualitative research. Each week students will learn about the practical skills as well as the theoretical aspects of conducting social science research. Through a series of practical writing assignments, in-class workshops and peer projects, students will learn key research skills— formulating a research question, identifying an empirical research site, sourcing informants, rapport building, conducting interviews and practicing field note techniques. The teaching of research methods will proceed through a close reading of select texts, each of which highlight the possibilities and limits of particular methods- such as interviews, case studies, participant observation, etc. The last third of the course will be devoted to a short on-campus research project in groups or pairs where students will test the methods and approaches they have studied. The course is envisaged as a stepping stone to help students embarking on their undergraduate thesis projects. The course is also designed as a methods course for graduate students in the interdisciplinary humanities and social sciences. For graduate students, the course will proceed as a reading course which enables

them to start thinking critically about key debates in the social sciences, and the methods best suited to their own topic of study.

### **SPS303 - Locating Globalisation**

**Credits: 3**

We wear global brands, consume global media, enjoy world cuisine, and use westernized slang. We wish to study, work or settle 'abroad'. Simultaneously, we remain passionately attached to national identities, personal communities and local products, practices and norms. Such contradictions are now a part of our everyday lives but are undergirded by complex historical processes of movement and flow- of production processes, labour, capital, technology and ideas. This course aims to 'locate' globalization, not by treating global and local as binaries, but by studying different approaches, understandings and critiques of what remains a slippery process and concept. Rather than treating globalization as an analytically isolable object, process or phenomenon, we try to understand how it is embedded in production, value, consumption, desire and politics. Thus, the course will cover broad themes including economic globalization, cultural globalization, political, technological and ecological globalization. The course will engage with abstract theories of globalization and also its concrete manifestations in different parts of the world. Finally, the course, will complicate salutary narratives of globalization by looking at questions of rising income inequality, cultural nationalisms and ecological crisis. Course material will comprise mainly book chapters and academic journal articles, complemented by commentaries in reputed global journals and videos and film where relevant.

### **SPS352 - Gender and Citizenship**

**Credits: 3**

Scholarship on the topic of citizenship unfailingly reminds us that 'citizenship is a contested concept' or a 'terrain of struggle'. While many of these contestations are peculiar to their contexts, one debate that has invariably shaped our understanding of citizenship is that between citizenship as a universal principle and that of group-differentiated citizenship. The principle of universal citizenship suggests that the benefits of being a citizen have been becoming progressively universal and equal. The group-differentiated understanding of citizenship, however, exhorts that a theory of citizenship that is blind to differences only deepens the marginalization that disadvantaged groups experience in society. This course will use this debate as a jumping board to dive into the Indian story of gendering citizenship. The use of 'gender' is often critiqued for its singular focus on 'women'. This course will not necessarily be troubling that but will rather address the impossibility of a unitary category of woman. Drawing on critical intersectional feminist scholarship, this course hopes to provide a richly textured story of gendered citizenship in India. Women's movements and feminist movements in India have played a vital role in transforming gender based discrimination from an object of social reform to a subject of Rights. That said, these movements have been called out for their bias towards middle and upper class/caste women. Through an intersectional approach this course aims to highlight the challenges posed by marginalized groups about their exclusions both from Indian women's and feminist movements as well as from citizenship, while being attentive to the importance of feminist solidarity and coalition building across differences for inclusive citizenship. This course is organized around 3 Modules Politics of Representation, Assertion of

Rights, and Forging Feminist Solidarity. Readings have been selected to reflect the heterogeneity that marks the category of 'woman' but also to highlight how gendered identities are constituted through claims for citizenship, in turn, shaping our understanding of state and community. The Module on Representation is focussed on gendered struggles around inclusion in formal politics, a normatively male domain. While claims for political representation is in itself an assertion of rights, the course treats representation as a separate category because political representation often enables a more confident articulation of other rights. The module on Rights sheds light on the material realities of citizenship, its attendant exclusions, and the claims for rights-both in law and in practice- that these exclusions give rise to. Both group differentiated citizenship and an intersectional analysis troubles a number of citizenship scholars for their fragmenting effects. The module on Solidarity will focus on feminist movements that strive to build coalitions across differences for securing women's rights of equal citizenship. The course underscores that despite its gendered exclusions the promises of inclusive and universalist claims of citizenship makes engendering citizenship an important analytical and political tool for addressing wrongs.

### **SPS400 - Thesis/Capstone Project Proposal Course**

**Credits: 3**

This course is designed to help students research and write their BA thesis or capstone project in the Social and Political Sciences. The class will enable them to adopt a structured approach to working on their thesis by setting concrete deadlines with well-defined tasks for each week. This includes approaching and finalising a faculty advisor in the first month of the course, who will

guide them towards relevant literature, approaches and methodology. The course will facilitate them to reflect on their writing both in terms of its style and content. We will draw on texts that explain the skill-sets needed to enhance the practice of research and writing. The course will also help students develop as a collegial academic, able to engage with the works of their colleagues, provide constructive criticism and judiciously incorporate feedback from others into their work. By the end of the course they will have a proposal of a thesis or capstone project, with first drafts of each component of a thesis or a project, that they will continue to polish over the rest of the academic year.

### **SPS401 - Political Theory**

**Credits: 3**

This course invites students to critically engage with some foundational concepts in political theory that are at the heart of liberal democracies. It begins with an examination of classical ideas such as liberty, equality, and justice with the help of both classical and more recent texts. The course then explores theoretical debates on the concepts of rights and power from various philosophical perspectives. The final section of the course shifts its focus to contemporary crises faced by liberal democracies through the rise of illiberalism/illiberal politics. We interrogate the meaning of illiberalism, its global and Indian manifestations, and its intersections with state surveillance, Big Tech, and disinformation/information politics. Moving beyond the dominant Western canon, the course makes a deliberate attempt to incorporate perspectives from non-Western traditions, with particular attention to Indian political thought and theory.

SPS700 - Research Methods in the Social Sciences Credits: 4 What research

methods do social scientists use to understand phenomena such as human experiences, processes, events, relations and networks? What does 'fieldwork' entail, and how do researchers define and construct a field? How do social scientists establish the validity, rigour and verifiability of their research questions and hypothesis, while remaining open to the inherently unstable nature of social relations? This course introduces students to research methods in the social sciences through a combination of reading, discussion and fieldwork practice. Alongside tracing some of the key debates that have arisen in qualitative social science methodology, students will learn about new and evolving modes of virtual qualitative field work such as navigating digital and remote sites of research students and the ethics and power dynamics implicit in conducting qualitative research. Each week students will learn about the practical skills as well as the theoretical aspects of conducting social science research. Through a series of practical writing assignments, in-class workshops and peer projects, students will learn key research skills—formulating a research question, identifying an empirical research site, sourcing informants, rapport building, conducting interviews and practicing field note techniques. The teaching of research methods will proceed through a close reading of select texts, each of which highlight the possibilities and limits of particular methods—such as interviews, case studies, participant observation, etc. The last third of the course will be devoted to a short on-campus research project in groups or pairs where students will test the methods and approaches they have studied. At the undergraduate level the course is envisaged as a stepping stone to help students embarking on their undergraduate thesis projects but has been modified to be suitable for graduate students in the interdisciplinary humanities and

social sciences. For graduate students, the course will proceed as a reading course which enables them to start thinking critically about key debates in the social sciences, and the methods best suited to their own topic of study.

### **SPS752 - Gender and Citizenship**

**Credits: 3**

Course Description: Gender and Citizenship is an elective course in the Social and Political Sciences major and can serve as a Social Science GER for students from other Majors. It will also be simultaneously offered as a Graduate course. Scholarship on the topic of citizenship unfailingly reminds us that 'citizenship is a contested concept' or a 'terrain of struggle'. While many of these contestations are peculiar to their contexts, one debate that has invariably shaped our understanding of citizenship is that between citizenship as a universal principle and that of group-differentiated citizenship. The principle of universal citizenship suggests that the benefits of being a citizen have been becoming progressively universal and equal. The group-differentiated understanding of citizenship, however, exhorts that a theory of citizenship that is blind to differences only deepens the marginalization that disadvantaged groups experience in society. This course will use this debate as a jumping board to dive into the Indian story of gendering citizenship. The use of 'gender' is often critiqued for its singular focus on 'women'. This course will not necessarily be troubling that but will rather address the impossibility of a unitary category of woman. Drawing on critical intersectional feminist scholarship, this course hopes to provide a richly textured story of gendered citizenship in India. Women's movements and feminist movements in India have played a vital role in transforming gender based discrimination from an

object of social reform to a subject of Rights. That said, these movements have been called out for their bias towards middle and upper class/caste women. Through an intersectional approach this course aims to highlight the challenges posed by marginalized groups about their exclusions both from Indian women's and feminist movements as well as from citizenship, while being attentive to the importance of feminist solidarity and coalition building across differences for inclusive citizenship. This course is organized around 3 Modules Politics of Representation, Assertion of Rights, and Forging Feminist Solidarity. Readings have been selected to reflect the heterogeneity that marks the category of 'woman' but also to highlight how gendered identities are constituted through claims for citizenship, in turn, shaping our understanding of state and community. The Module on Representation is focussed on gendered struggles around inclusion in formal politics, a normatively male domain. While claims for political representation is in itself an assertion of rights, the course treats representation as a separate category because political representation often enables a more confident articulation of other rights. The module on Rights sheds light on the material realities of citizenship, its attendant exclusions, and the claims for rights-both in law and in practice- that these exclusions give rise to. Both group differentiated citizenship and an intersectional analysis troubles a number of citizenship scholars for their fragmenting effects. The module on Solidarity will focus on feminist movements that strive to build coalitions across differences for securing women's rights of equal citizenship. The course underscores that despite its gendered exclusions the promises of inclusive and universalist claims of citizenship makes engendering citizenship an important analytical and political tool for addressing wrongs.

SPS761 - Historical Anthropology: Of Fields and

Archives Credits: 3 This graduate course SPS761 is an IHS elective course. The course will familiarise students with the scope of research in historical anthropology. This domain understands individual and community experiences of place and time as being shaped by continuously evolving everyday practices and social structures. It will specifically attempt to think about connections between fields and archives - two important components in history and anthropology. Can the field move beyond physical spaces, and can the archive move beyond written/oral records? The course examines how time and temporality have been studied and how ordinary people form their subjectivity in relation to time through allied concepts like body, emotion, and experience. This is a reading and writing intensive course.

#### **STA100 – Probability**

**Credits: 3**

Probability Theory is the study of chance. It forms an important pillar of which statistics & data science have been built. This course is an introduction to probability for a diverse audience. The course covers the fundamental concepts & basic examples, assuming no prior knowledge of the subject. The major topics include: Discrete & Continuous sample spaces & probability; random variables, distribution, independence, expectation, conditional expectations & probabilities, generating functions & limit theorems.

#### **STA101 - Introductory Statistics**

**Credits: 3**

This course provides an introduction to the elementary concepts of probability and statistics with specific reference to their applications to

business, economics, and management. Topics covered include: probability distributions, linear correlation, hypothesis testing, confidence intervals, sampling methods, analysis of variance and linear regression

#### **STA501 - Applied Statistics**

**Credits: 3**

This course is designed for incoming PhD students in the School of Public health who is assumed to have taken a minimum of one statistics courses. At first, the course starts by covering the basic courses in probability such as random variable, distributions, central limit theorem, approximations etc. Subsequently, we cover hypothesis testing in detail so that students can test their research hypothesis. Finally, the course ends with some practical (also theoretical) concerns regarding bias. A simple illustration: Two students carry two different study designs on tobacco use in the student population at Ahmedabad University. The first may use a convenience sampling to estimate the prevalence of smoking whereas the second might use a well-designed experiment for the same. First, we will try to observe the difference in the prevalence in the two studies. Second, we will use bias correction procedures to correct the prevalence rate estimated from the first study.

#### **School of Engineering and Applied Science**

#### **CHE100 - The World of Chemical and Environmental Engineering**

**Credits: 1.5**

This course serves as an introduction to the interdisciplinary fields of Chemical and Environmental Engineering, providing students with a fundamental understanding of key

principles, processes, and practical applications in chemical and environmental engineering. Course activities include: Understanding chemical engineering models, drawings and process flow diagrams, water/effluent treatment systems, from a variety of process industries covering petrochemical, paper and pulp, textile, fertilizer, and pharmaceutical industries, and many others. A historical perspective will also be provided. The course integrates concepts from chemistry, biology and engineering principles associated with various industries.

### **CHE101 - Physical Chemistry**

**Credits: 1.5**

This course covers the fundamentals of physical chemistry and has been designed to cater the needs of chemical and mechanical engineering students. This course includes chemical kinetics, electrochemistry, equilibrium and Batteries etc. This course makes the basis for some of the specialized topics of chemical engineering curriculum. Physical Chemistry is an integral part of chemical and mechanical engineering. In engineering, kinetics, equilibrium, normality, molarity, molality, batteries etc all such terms keep on coming in each or other subject. So students need to have a conceptual clarity through this Physical Chemistry course.

### **CHE204 - Mass Transfer Operations - I**

**Credits: 3**

In this course, first the fundamentals of mass transfer will be discussed. This will include molecular and convective diffusion, estimation of mass transfer coefficients and different theories of mass transfer. Then, gas-liquid operations will be covered. This will include characteristics of different contacting devices and details of gas absorption and drying.

### **CHE315 - Mass Transfer**

**Credits: 3**

In this course, first the fundamentals of mass transfer will be discussed. This will include molecular and convective diffusion, estimation of mass transfer coefficients and different theories of mass transfer. Then, gas-liquid operations will be covered. This will include characteristics of different contacting devices, details of gas absorption, Humidification Operations, and drying.

### **CHE316 - Chemical Kinetics and Reaction Engineering**

**Credits: 3**

This course will cover the principles involved in the selection and design of chemical reactors for homogeneous reactions.

### **CHE317 - Process Dynamic, Control and Automation**

**Credits: 1**

This laboratory course gives students practical experience with automation, system dynamics, and process control. Students will carry out experiments pertaining to feedback control and dynamic behavior. The course prepares students for process control difficulties in the real world by combining contemporary control techniques with real-world applications of controllers and actuators.

### **CHE402 - Chemical Process Simulation**

**Credits: 2**

### **CHE440 - Process Design and Economics**

**Credits: 2**

In many cases the processing costs associated with the various process alternatives differ by an order of magnitude or more, so that we can use shortcut calculations to screen the alternatives. However, we must be certain that we are in the neighborhood of the optimum design condition for each alternatives, to prevent discarding an alternative because of a poor choice of design variable. This course brings together the concepts of engineering and economics for chemical plant design and optimization. This course can be termed as the pinnacle of the chemical engineering curriculum as it covers Mechanical Design of chemical Process Equipment followed by Plant design covering Front End engineering, Preliminary and detailed Engineering including costing- equipment cost, fixed capital Investment and working capital.

### **CHE508 - Advanced Transport Phenomena**

**Credits: 3**

Transport phenomena deals with the study of momentum, heat and mass transfer in terms of spatial variation of velocities, temperatures or concentrations for different types of geometries with incorporation of boundary conditions. The advanced course deals with two phase flows pressure drop in two phase systems, temperature and concentration distribution in such systems and practical applications of the same

### **CHE571 - Surfactant Science & nanotechnology**

**Credits: 3**

Study of colloids and interfaces is highly multidisciplinary in nature combining both the concepts and applications from such diverse domains as Chemistry, Chemical Engineering,

Biology and Material Science. Knowledge of the Chemistry/Biology of surfactants is of fundamental importance in areas as diverse as detergents, oil recovery, paints, paper coatings, food, cosmetics and pharmaceuticals. Understanding of surfactant science described in this course comes with a description of why the science will be useful. There will be three hours of session per week. The students will be able to comprehend and solve the problems related to personal care and pharmaceutical industries.

**CHE700 - Advanced General Chemistry**  
**Credits: 3**

This advanced chemistry course designed for PhD student's covers important topics of inorganic, physical and organic chemistry. It focuses primarily on important inorganic concepts like transition elements and coordination chemistry. It also gives an insight to physical concepts like chemical kinetics, equilibrium and electrochemistry. Along with this, the course gives an overview to important instrumental techniques used in chemistry. This course makes the basis for some of the specialized topics which will be beneficial for the PhD students.

**CHY100 - Chemistry**  
**Credits: 3**

This introductory chemistry course covers fundamentals of inorganic and physical chemistry. It focuses primarily on important inorganic concepts like transition elements, coordination chemistry, acids and bases. It also gives an insight to physical concepts like chemical kinetics, equilibrium, electrochemistry and solution chemistry. Along with this, the course gives an overview and hands-on experience to important instrumental techniques used in

inorganic and physical chemistry. This course makes the basis for some of the specialized topics of chemical engineering curriculum.

**CMP651 - Quality management and Inspection**  
**Credits: 3**

This course provides a comprehensive understanding of Quality Management Systems (QMS) with emphasis on ISO 9001, AS9100, ISO 14001, and ISO 45001 standards, and supplier audits. Students will learn about quality documentation, process traceability, inspection methods, and risk management strategies. Topics also cover Destructive Testing (DT) and Non-Destructive Testing (NDT), First Article Inspection (FAI), Root Cause Analysis (RCA), and cleanroom practices. Laboratory activities include hands-on exposure to DT/NDT tools, quality inspection instruments, process audits, and compliance assessments. The course equips students with practical skills and theoretical knowledge to implement quality frameworks across composite and allied manufacturing industries.

**CMP662 - Fatigue and Fracture of Composites**  
**Credits: 3**

This course delves into the principles of fatigue and fracture mechanics as they relate to composite materials, which are increasingly used in advanced engineering applications. The curriculum examines the fatigue behavior of composites, exploring damage mechanisms and their progression under cyclic loading. It also covers fracture processes, including crack initiation and propagation, and their impact on structural integrity. Analytical methods for predicting fatigue life and fracture performance are discussed, providing tools for assessing

reliability under various loading conditions. By integrating theoretical knowledge with practical insights, the course prepares students to evaluate and design composite structures for enhanced durability and safety.

**CMP691 - MTech Thesis-1**  
**Credits: 9**

**CSD105 - Introduction to Data Science**  
**Credits: 3**

This interdisciplinary university wide first year data science provides an introductory overview of the field, bringing together the foundational concepts from computer science, mathematics, and statistics with practical applications in various disciplines. The course aims to equip students with the skills to •collect, clean, analyse, and interpret data, •complement their pursuit of more advanced studies or careers in various domains •apply Data Science skills to contribute towards solving inter-disciplinary real-world problems. This course provides a broad introduction to this fast-emerging field, combining elements of mathematics, statistics, computer science, and domain-specific knowledge. Students will be exposed to the fundamental concepts in data analysis, programming, and machine learning, preparing them for more specialized study in data science or related fields. The emphasis on the concepts is mostly at an intuitive level to make it accessible to a broader spectrum of students. Hence, students will be exposed to concepts through illustrations, hands-on exercises and case studies that attempts to provide a high-level view of the data lifecycle and its application across various disciplines. These applications are not limited to solving problems in computer science, statistics, and maths but is used to solve problems in arts, economics, medicine, education, and the

humanities.

**CSE100 - Fundamentals of Computer Programming**  
**Credits: 3**

The course is aimed to give exposure to programming paradigms and to develop the problem solving ability. The course would introduce the concepts of computer programming. Following topics would be covered during the course: Problem solving using Algorithms and Flowcharts; Programming paradigms; Foundations of Python and C programming; Visual programming; Operators; Control statements; Input/output operations; Decision making and branching; Type conversions; Collections; Functions; String; File management; Exception handling.

**CSE103 - The World of Computer Science and Engineering**  
**Credits: 2**

Elements of Computer Science and Engineering provide students with a foundational understanding of essential computer science and engineering concepts. Through interactive lectures, hands-on activities, and practical exercises, students will explore the core principles of computing, including hardware components, software systems, data representation, and algorithmic thinking. This course aims to develop critical thinking skills and problem-solving abilities with a computational context. At the end of the course, students will have gained proficiency in logical reasoning, computational thinking, basic programming concepts, and an appreciation for the interdisciplinary nature of computer science and engineering. No prior programming experience is required, making this

course accessible to students from diverse academic backgrounds.

**CSE205 - Data Structures**  
**Credits: 4**

The course covers basic data structures and techniques for design and analysis of data structures with a rich set of applications in research and industry. The course provides a thorough introduction to the analysis of the complexity of algorithms. It shows how to use these analysis for algorithms using the basic data structures like Lists, Stacks, Queues, Binary Search Trees, Heaps and Balanced Search Trees for storing data, sorting and searching problems. We will visit Sorting and Hashing. We will also introduce tools and techniques for computational analysis of these basic data structures. It covers also some more advanced problems tree algorithms.

**CSE213 - Digital Logic with Hardware Description Language**  
**Credits: 4**

It is a fundamental course to introduce the basic principles of digital logic design and covers the following broad topics • Number system • Boolean algebra • Combinational Logic • Sequential Logic • Memories • Hardware Description Language

**CSE300 - Software Engineering**  
**Credits: 3**

This course introduces the fundamental principles and practices of software engineering. Students will gain an understanding of the software development lifecycle, software design principles, and an introduction to testing methodologies.

They will also learn to apply these concepts in developing real-world software applications.

**CSE305 - Data Structures**  
**Credits: 4**

The course covers basic data structures and techniques for designing and analyzing data structures with rich applications in research and industry. The course provides a basic introduction to the analysis of the time complexity of algorithms. It shows how to use this analysis for algorithms using basic data structures like Lists, Stacks, Queues, Binary Search Trees, Heaps, and Balanced Search Trees for storing data, sorting, and searching problems. Hashing, depth-first search, and breadth-first search are also covered.

**CSE332 - Operating Systems**  
**Credits: 4**

The course will introduce the fundamental concepts of operating system. The course relates these fundamentals with the design issues related to the development of modern operating systems. Understanding of concepts will be visualized and realized using system programming. Topics include Process Management, Process Scheduling, Concurrency, Memory Management, Virtual Memory, I/O Management and Disk Scheduling, Security, Distributed Systems, Virtualization and Operating Systems for Mobile Devices.

**CSE340 - Operating Systems**  
**Credits: 3**

It is a foundation course in Computer Science to introduce basic concepts and internals of modern operating systems.

### **CSE403 - Introduction to Embedded Systems**

**Credits: 3**

This course explores the design of Embedded Systems using microcontrollers, widely used peripheral devices and Embedded C Programming. The internal architecture and features like timers, interrupts, communication device drivers, A/D, D/A, Real Time Clock, PWM, and other peripherals of microcontroller will be discussed in detail. The interfacing of microcontrollers with widely used external peripherals like LCD displays, keyboards, DC motors, etc. using C programming will be performed. Course Credits: 3 (Lectures: 1.5 Hours/week; Laboratory: 3 Hours/week)

### **CSE404 - Operating Systems**

**Credits: 4**

The course having 4 credits (3 hours of weekly theory and two hours of weekly lab sessions) will introduce the fundamental concepts of operating system. The course relates these fundamentals with the design issues related to the development of modern operating systems. Visualization and practical execution will enhance conceptual understanding. Topics include Process Management, Process Scheduling, Concurrency, Memory Management, Virtual Memory, I/O Management and Disk Scheduling, File management, Security, Distributed Systems, Virtualization, and Operating Systems for Mobile Devices.

### **CSE406 - Theory of Computing**

**Credits: 3**

This course gives an introduction to theory of automata, formal languages and computational complexity. In particular, the content includes

deterministic and non-deterministic finite automata, pushdown automata, Turing machines, decidable and undecidable computation problems. Topics will include some aspects of computational complexity. Polynomial (P) and non-deterministic polynomial (NP) complexity class of algorithms.

### **CSE500 - Statistical Learning**

**Credits: 3**

Welcome to a CSE500 course on Statistical Learning. The content begins with foundational aspects of probability and statistics leading to advanced statistical techniques including regression, decision trees and support vector machines. Students will learn to apply and analyse statistical methods effectively in various data science contexts like healthcare, finance, and social media analysis.

### **CSE518 - Artificial Intelligence**

**Credits: 3**

Artificial intelligence (AI) is impacting human life in a big way. The syllabus is State spaces, Search (uninformed, informed, local), Games and adversarial search, Logical inference, Constraint satisfaction problems, Bayesian networks, Markov chains, Hidden Markov models, Forward and Viterbi algorithms, Markov decision processes, Machine learning, Neural networks, Reinforcement learning, Deep learning and AI for Robotics.

### **CSE521 - Big Data Analytics**

**Credits: 3**

The explosion of social media and the computerization of every aspect of social and economic activity resulted in creation of large

volumes of mostly unstructured data: web logs, videos, speech recordings, photographs, e-mails, Tweets, and similar. In a parallel development, computers keep getting ever more powerful and storage ever cheaper. Today, we have the ability to reliably and cheaply store huge volumes of data, efficiently analyze them, and extract business and socially relevant information. The key objective of this course is to familiarize the students with most important information technologies used in manipulating, storing, and analyzing big data.

### **CSE525 - Theory of Computing**

**Credits: 3**

This course gives an introduction to theory of automata, formal languages and computational complexity. In particular, the content includes deterministic and non-deterministic finite automata, pushdown automata, Turing machines, decidable and undecidable computation problems. Topics will include some aspects of computational complexity. Polynomial (P) and non-deterministic polynomial (NP) complexity class of algorithms.

### **CSE526 - Advanced Computer Arithmetic: Algorithms and Sub-systems**

**Credits: 3**

This is an elective for the BTech CSE/ICT program (can be taken by BS in CS students, if they have the pre-requisite), and an elective for the MTech CSE program. This course would cover the following (tentative) topics: Review of Digital Sequential Circuits: •Finite State Machines (FSM),•Review of RTL/pipelined systems Arithmetic-Logic and Datapath Sub-systems (Logic Structures / Algorithms, and Implementations): •Arbiter (FSM) with

predefined priority order, arbiter with request order •Pseudo-Random number generator based on Linear Feedback Shift-Registers (LFSR), modular and standard LFSR •Error Correcting Codes: LFSR based CRC, and Hamming7-4 and 12-8 codes• Insertion Sort digital implementationDigital Logic/Structures for Adders: •Bit-serial adder •Ripple-carry adder•Carry-skip or bypass adder, multi-level skipping •Carry-select adder (multi-level) •Conditional-sum adder •Carry look-ahead adder (based on propagate and generate signals), multi-level look-ahead blocks •Prefix-tree adders: Radix-2 and radix-4 Brent-Kung adder, Kogge-Stone adder, Sklansky adder, Arbitrarily drawn prefix-tree structures•Hybrid adders: Carry select adder with look-ahead block, Carry select adder with prefix-tree (Brent-Kung or Kogge-Stone) block (aka “sparse-tree adder”) •Carry-Save Adder (CSA) tree for multi-operand addition: Wallace and Dadda tree adder structures based on FA and HA•Concept of column based counting: 3-to-2 counters, 5-to-3 counters, 10-to-4 counters •Multi-operand (serial) addition using one CSA and one Carry Propagate Adder (CPA) •Signed-number trick (complementing sign-bit and placing -1 in the MSB column) applied to multi-operand additions Digital Logic/Structures for Multipliers•Unsigned Multiplier (serial left-shift or right-shift algorithm) •Unsigned Array Multiplier and its parallelogram/rectangular structure •Radix-2, radix-4 and radix-8 Booth encoding based multiplier (for signed operands) •Modified Baugh-Wooley Multiplier (for signed operands) and its parallelogram/rectangular structure •Divide and conquer multipliers (for unsigned operands) •Squaring circuit (single operand multiplier, with reduced partial products) Digital Logic/Structures for Division: Non-restoring method, and restoring method, SRT (Sweeney, Robertson and Tocher) algorithm,

Goldschmidt algorithmDigital Logic/Structures for Mathematical functions: • Introduction to Fixed-Point (FXP) number system and related quantization error• CORDIC Algorithm (circular/rectangular/hyperbolic versions with rotational/vectoring modes), for approximation of math functions• Newton-Raphson method (for reciprocal, for division, for reciprocal of  $\sqrt{x}$ ) • Piece-Wise-Linear-Approximation of math functions (based on Look-up table method) NOTE: Many of the above topics would be taught, with the help of relevant Verilog HDL codes and Logisim tool

### **CSE540 - Cloud Computing** **Credits: 3**

The course will introduce basic concepts of distributed and parallel computing, service-oriented architecture, virtualization, service and delivery models of cloud computing. The course will include internals of virtual machines, development and deployment of cloud services. Challenges and research issues like resource provisioning, Virtual Machine scheduling, load balancing, VM migration, privacy and security, energy efficiency in clouds etc. will be introduced. Students will work on group projects to address development or deployment related aspects of cloud services/applications.

### **CSE601 - Computational Thinking** **Credits: 3**

This course will introduce the process of solving complex problems using computers. It will introduce concepts from Discrete Mathematics including logic, relations and functions, and proofs. This will also discuss fundamental concepts in Graph Theory and a few relevant important graph algorithms. The second part of

the course will focus on Linear Algebra, which will include a discussion on Fields, Vectors, Basis and Dimensions. Practical applications of these concepts will be explained.

### **CSE605 - Advanced Data Structures and Algorithm Analysis** **Credits: 4**

The course starts with a refresher on fundamental data structures and techniques for design and analysis of data structures with a rich set of applications in research and industry. Topics include the analysis of the complexity of algorithms, Linked Lists, Stacks, Queues, Binary Search Trees, Heaps and Balanced Search Trees for storing data, sorting, searching AVL trees, 2-3 trees and B+ trees, tuples and dictionaries. We will also discuss several key algorithms, and practice several real-world problems in data structures and algorithms. We will then move on to advanced topics in Data Structures such as Disjoint Sets Data Structures (including union-find), Trie Data Structure (including all operations and complexity analysis) and Segment Trees. We will also discuss divide-and-conquer and dynamic programming strategies.

### **CSE606 - Cloud and Large-Scale Computing** **Credits: 3**

The course will introduce basic concepts of distributed and parallel computing, service-oriented architecture, virtualization, service and delivery models of cloud computing. The course will include internals of virtual machines, development and deployment of cloud services. Challenges and research issues like resource provisioning, Virtual Machine scheduling, load balancing, VM migration, privacy and security, energy efficiency in clouds etc. will be introduced.

Students will work on group projects to address development or deployment related aspects of cloud services/applications.

**CSE618 - Artificial Intelligence Laboratory**  
**Credits: 3**

This laboratory-based course gives hands-on experience with design and implementation of Artificial Intelligence (AI) and Machine Learning (ML) based systems.

**CSE661 - Major Project Part-1**  
**Credits: 16**

This course is for M.Tech. CSE students who will be working on their project at any external institute (or company) or internally at Ahmedabad University. If the project is external, the student will be assigned a SEAS Faculty member as a co-mentor.

**ECE209 - Digital Design**  
**Credits: 4**

The course aims to provide an understanding of the fundamentals of designing digital circuits comprising a basic computer system. Students would be introduced to various methods used for designing diverse digital electronic circuits.

**ECE210 - Signals and Systems**  
**Credits: 3**

The course will broadly cover the essential mathematical foundations required to understand future courses in the allied areas of Electrical and Electronics Engineering (EEE). In particular, the course will cover the following: introduction to signals and systems, linear time-invariant systems and related characteristics, Fourier series and

Fourier transform, sampling, Laplace transform, and the Z-transform.

**ECE310 - Wireless Communications**  
**Credits: 3**

**ECE501 - Digital Image Processing**  
**Credits: 3**

This course is preliminary course on various Image Processing Methods. It covers the topics starting from basics of Image formation to handling various types of images.

**ECE502 - VLSI Design**  
**Credits: 3**

This is an elective for the BTech CSE/ICT program (can be taken by BS in CS students, if they have the pre-requisite), and an elective for the MTech CSE program. This course will cover: Trends in VLSI industry; MOS Cap; IV characteristics of MOSFET; CMOS inverter and VTC characteristics; CMOS standard and compound gates and transistor sizing; skewed gates, RC delay analysis of CMOS gates; Gate layout and Lambda rules; Logical effort method for delay analysis; power dissipation (dynamic and static power), Pseudo-NMOS gates, pass-transistor gates, dynamic logic circuits – domino gates, etc.

**ECE504 - Internet of Things**  
**Credits: 3**

The course “Internet of Things” focuses on connecting sensors, actuators and other electronic devices to internet using two platforms – Arduino Platform and Raspberry Pi platform. The data and information sent to the internet can be collected/stored, analysed and utilized for

decision making. All students will build two projects as part of the course. The example of projects may include Home Automation using IoT, Irrigation Management System using IoT, etc. The course is divided into following units. Unit 1: Introduction to Internet of Things: Review of Embedded Systems, IoT Fundamentals, Fundamental Building blocks of IoT Devices, IoT in various domains of life. Unit 2: Introduction to Arduino Platform Unit 3: Actuators: Study of selected actuators, their operating principles, application etc. Unit 4: Sensors: study of fundamental principles of sensors for various parameters like temperature. Their comparisons and use in IoT. Unit 5: Internet and communication protocols Unit 6: Introduction to Raspberry Pi Platform Unit 7: Linux Fundamentals Unit 8: Introduction to Programming in Python Unit 9: Selected Advanced Topics in Internet of Things

**EEE201 - Fields and Waves**  
**Credits: 1.5**

This is a half-semester course. This course introduces students to the fundamental principles of electromagnetics, encompassing electrostatics, magnetostatics, and electromagnetic wave propagation. Students will explore vector calculus applications, Maxwell's equations, and their relevance to engineering problems, laying the groundwork for advanced studies in electrical and electronics engineering.

**EEE202 - Materials in Electrical Engineering**  
**Credits: 1.5**

The course aims to provide a basic understanding of the different materials used in electronics and electrical engineering. It will broadly focus on magnetic materials, dielectric materials,

conducting materials, semi-conductors, and superconductors, emphasizing their applications in different devices.

### **EEE203 - Signals and Systems**

**Credits: 3**

The course will broadly cover the essential mathematical foundations required to understand future courses in the allied areas of Electrical and Electronics Engineering (EEE). In particular, the course will cover the following: introduction to signals and systems, linear time-invariant systems and related characteristics, Fourier series and Fourier transform, sampling, Laplace transform, and the Z-transform.

### **EEE701 - Electronic Systems Design**

**Credits: 3**

This course provides a broad understanding of the electronic systems in communications, signal processing and other electronics applications. This course covers an overview of the electronic systems and their applications, system architecture and design specifications, electronics sub-systems, integrations, analog, digital and mixed-signal systems, circuit design techniques, tools and technologies, power, thermal and noise management in the electronic systems, testing and optimization of such systems with a focus on the real-world applications.

### **EEE702 - Microwave Transistor Amplifiers: Analysis and Design**

**Credits: 3**

This course addresses the theoretical and practical aspects of the microwave transistor amplifier design. It covers key concepts in high-frequency transistor behavior, impedance matching, stability

analysis, noise performance, and advanced design techniques, equipping students with the knowledge and skills to design, analyze, and optimize the microwave amplifiers.

### **EEE703 - Microwave and RF Design of Wireless Systems**

**Credits: 3**

This course introduces students to the field of wireless communications from the RF systems perspective. It offers a quantitative and, design-oriented presentation of the analog RF aspects of the modern wireless telecommunications including the topics in noise, intermodulation, dynamic range, and system level aspects of the receiver design. The aim of this course is for the student to be able to analyze a complete radio system from the transmitter through the receiver front-end, and quantitatively evaluate factors.

### **EEE704 - Design for Electromagnetic Compatibility**

**Credits: 3**

This course provides an in-depth exploration of electromagnetic compatibility (EMC) principles, combining theoretical foundations with practical design strategies. This course covers essential EMC concepts, design techniques to mitigate interference, and real-world case studies. Students will gain understanding in diagnosing and resolving EMC issues, with a focus on both circuit and system-level design considerations.

### **EEE705 - Fundamentals of Semiconductor Materials**

**Credits: 3**

This course provides an in-depth knowledge of semiconductor materials, focusing on electronic

structure, carrier dynamics, defect physics, and advanced material properties. It covers wide-bandgap semiconductors, heterostructures, quantum materials, and emerging 2D materials for next-generation electronics and optoelectronics. The course also examines semiconductor characterization techniques, and novel applications in areas like photonics and quantum technologies.

### **ENR100 - Visualisation**

**Credits: 1.5**

Introduction: Relevance of technical drawing in engineering field. Types of lines, Perspective view Orthographic projection of Points and Lines Orthographic projection of Solids: Isometric Projection: Isometric View and Projections Sections of Solids: Introduction to Computer Aided Drawing: Role of CAD in design and development of new products, Advantages of CAD. Creating two dimensional drawing with dimensions using suitable software.

### **ENR101 - Product Realisation**

**Credits: 1.5**

This course aims to impart students with the knowledge of different products and processes. The topics include assembly, carpentry, sheet metal, origami and machining. The students learn design and manufacturing aspects of products and their industrial relevance.

### **ENR102 - Electronics and Magnetic Circuits and Devices**

**Credits: 4**

Analysis and design of passive circuits with Voltage and current sources. Steady state and transient analysis. Controlled sources and active

devices. Circuit theorems. Transducers. Semiconductors, Diodes, transistors and applications. Operational Amplifiers. Oscillators. Filters. IC applications. Magnetic circuits. Introduction to AC and DC machines

**ENR105 - Product Dissection and Realization**  
**Credits: 2**

This course imparts knowledge on the study of products with emphasis on generating bill of materials, part naming and numbering, their materials of construction and processes of manufacture. Aspects of mechanical, electrical, electronics, and civil engineering, amongst others, and design and ergonomics are experienced. Students practice a variety of hands-on manufacturing operations, followed by making of a multi-part, multi-process components to realize a product. Processes of manufacture include, but are not limited to machining, 3D printing, joining and welding, weaving, casting, finishing and painting, using materials, such as, mild steel, aluminium, wood, polymeric materials, concrete mixes, and fabrics, amongst others.

**ENR106 - Introduction to Programming**  
**Credits: 3**

The course begins with logical problem solving exercises and then introduces the students to the world of programming using Python. Further, the course includes rigorous exercises with scenario-based problem-solving questions and classical computer science puzzles. Python exercises including hands-on exercises to complete the given code, debugging code, writing alternate code and improvising code are included for various problems. The course also requires students to do a course project in a pair or a group of three. Moreover, the course introduces C

language to the students for their future courses. This is a beginner-level computer programming course designed for engineering students.

**ENR107 - Digital Electronics and Microprocessors**  
**Credits: 3**

The course has two parts. One part centers around a computer board which is interfaced to input and output devices and explores the use of Analog to Digital converters and Digital to analog converters and the operations through a computer program. The second part involves the study of architecture of microprocessors. The functions of - data and address bus, program counter, stack pointers, registers and arithmetic logic units and control unit will be studied. The distinction between serial and parallel I/O operations will be explored. The concept of interrupts will be studied. Introduction to assembly language programs will be given and sample programs will be studied. Since computerized measurement and control is now present in all the branches of Engineering this foundation for the same will be highly useful for students of all the Engineering disciplines

**ENR108 - Materials and the Engineering World**  
**Credits: 3**

Starting with history, the course will look at the evolution of materials, their applications, and processing using the compendium Cambridge Engineering Selector as a guide. Physical, chemical and biological properties will be discussed. These properties will be connected with the science of material structure, such as, crystals and grains, at different length scales. Standards of materials design will be

introduced, as also how these materials are available in the market. Hands-on laboratory work will give experience of measuring material properties, and structure of materials. Engineering uses and environmental aspects of the products will be integrated into the course.

**ENR110 - Differential Equations in Engineering**  
**Credits: 1.5**

**ENR114 - Engineering Visualization and Drawing**  
**Credits: 2**

This course develops the ability to think and communicate pictorially. Concepts of perspectives, orthogonal projections, sectional views, and assembly drawings will be introduced. Free-hand sketching, and making drawings with graphics and CAD software will be extensively practiced. Skills on making animations using animation and CAD software will be imparted. Methods of dimensioning and use of standard symbols in mechanical, electrical, architectural, and process plants will be introduced. AR/VR tools will be used to augment visualization. The importance of CAD in product design will be introduced via small projects.

**ENR203 - Material Science and Engineering**  
**Credits: 2**

This course provides the basis for the understanding of structural, mechanical, electrical, optical, and magnetic properties of the Material. It will provide an insight into material science in modern society via studying the advanced materials, understanding the process, and product realization. It helps in understanding how the relationship between materials' structure,

processing, and properties influence the product. Laboratory sessions will be devoted to demonstrations and experiments that illustrate the lectures. The course will provide significant insight into the fundamental characteristics of metals, ceramic, nanomaterials, polymers, and nanocomposites. Topics: Introduction to material science and engineering, Atomic structure and bonding in materials, Crystal structure and crystal geometry, Solidification, crystalline imperfection and diffusion in solids, Phase diagrams, engineering alloys, Introduction to ceramic, magnetic materials, polymers, nanomaterials, electronic materials, composite materials.

**ENR204 - Mechanics of Rigid Bodies**  
**Credits: 2**

This course introduces the fundamental principles of modelling and analysis of a rigid body and rigid multi-body mechanical system. The course emphasizes problem-solving and the students develop critical thinking skills and proficiency in analysis and use of computational tools, preparing them to address real-world engineering challenges in mechanical systems. Key topics include kinematics of a rigid body and rigid multi-body systems, degrees of freedom, force and moments, free-body diagrams, deriving equations of motion using Newton's laws and Euler's equation, and energy-based methods, motion analysis and visualization including numerical solutions of equations of motion.

**ENR206 - Sensors, Instruments and Experimentation**  
**Credits: 2**

This course gives knowledge and hands-on skills about sensors, instrumentations, and their interfacing with computers. Basics of uncertainty

analysis are introduced and practised in experiments. Laboratory exercises involve sensor and instrument construction and principles of operation along with specifications/data sheets of manufacturers. Hands-on exercises include installation, calibration, operation, and interfacing with computers/DAS. A variety of instruments and sensors for physical quantities will be considered, such as, temperature, pressure, force, torque, strain, displacement, velocity, acceleration, voltage, current, flow rate, illumination, sound level, etc. Phases of experimentation will be introduced and students will experience these when executing a project experiment.

**ENR207 - Electric and Magnetic circuits**  
**Credits: 3**

The course introduces circuit variables like charge, current, voltage, power and energy. Steady state analysis for circuits with DC and sinusoidal sources will be studied. Introduction to magnetic circuits and transformers will be given. Basic operational amplifier circuits will be covered. Circuit simulators for testing circuits will be studied. Also first order transients will be explored.

**ENR208 - Engineering Thermodynamics**  
**Credits: 2**

**ENR209 - Mechanics of Rigid Bodies**  
**Credits: 2**

This course introduces the fundamental principles of modelling and analysis of a rigid body and rigid multi-body mechanical system. The course emphasizes problem-solving and the students develop critical thinking skills and proficiency in analysis and use of computational tools, preparing

them to address real-world engineering challenges in mechanical systems. Key topics include kinematics of a rigid body and rigid multi-body systems, degrees of freedom, force and moments, free-body diagrams, deriving equations of motion using Newton's laws and Euler's equation, and energy-based methods, motion analysis and visualization including numerical solutions of equations of motion.

**ENR210 - Continuum Mechanics**  
**Credits: 2**

This course lays foundation for fundamental theories of continuum mechanics with applications to various disciplines. After defining material and spatial coordinate systems, definitions of various properties of a continuum field are developed. Displacement gradients, strain and stress tensors are defined and explained with associated theories, such as, Hooke's law for elasticity and plasticity. Yield criteria and plasticity will be covered with practical applications. Balance principles for mass, momentum and energy are discussed with applications. Constitutive equations for different types of materials, including solids, fluids, such as, viscous fluids, Newtonian fluids, plastics, etc. are introduced, along with practical applications from various fields.

**ENR211 - Statistics for Engineers**  
**Credits: 1.5**

Statistics has applications in several aspects of engineering, such as, data interpretation, uncertainty analysis in experiments, quality control, machine learning, and simulations of networks amongst others. Topics include fundamentals of linear and introduction to multivariable regression, hypothesis testing,

analysis of variance, design of experiments, and simulation. Applications will be drawn from engineering experiments, quality control, sampling, numerical integration, and traffic analysis in data networks. The exercises will require use of Python or any other programming language.

**ENR213 - Control Engineering Fundamentals**  
**Credits: 2**

Control of the physical process, design, and development of the processing system requires understanding the process parameters, state(s) to control, and systems characterization in terms of workable and unstable scenarios. The course on control engineering covers the time domain for analysis and synthesis of controllers that ensure stability and desired performance characteristics, with a concise examination of Linear Time-Invariant (LTI) systems through ordinary differential equations, leveraging tools like Laplace transform to analyse open-loop systems. The course introduces the concept of feedback, which is motivated by performance and stability considerations. This course offers a foundational understanding of linear systems, transfer functions, and Laplace transforms. Explore key topics such as stability, feedback, and essential design tools for transient response specifications. An introduction to frequency-domain techniques is provided, with a practical emphasis on laboratory experiments and a hands-on control design project, ensuring a well-rounded learning experience.

**ENR215 - Design, Innovation and Making**  
**Credits: 2**

Students work in teams that start with customer needs, societal relevance, and problem

identification resulting in a project proposal. The second phase, includes development of concept designs, evaluation of alternative designs, and concept design finalization. Various design techniques, e.g. TRIZ, Poka Yoke, FMEA, etc. and materials selection using CES are used to prepare engineering drawings resulting in a complete engineering design including Bill of Materials (BoM). To realize the design, techniques of DFM, DFA, are applied and manufacturing drawings are prepared. After making or buying the components, the assembly is carried out to realize the proof-of-concept. After testing, the products are displayed in an expo. Finally, manuals are prepared, and recyclability aspects are addressed.

**ENR311 - Heat Transfer and Applications**  
**Credits: 3**

This course builds up on continuum mechanics and introduces fundamentals of: Thermal conduction in solids, one-dimensional conduction, lumped capacitance, extended surfaces; Radiative properties of surfaces, and radiative transfer between surfaces, 3-surface network, electrical analogy; Boiling including pool and forced boiling; and Condensation including drop-wise and film condensation. Basics of heat exchangers LMTD and effectiveness-NTU methods. Evaporative cooling and evaporators. Multi-modal heat transfer, heat pipes, heat transfer networks. Applications in electrical/electronic device cooling, food processing, manufacturing, and buildings, amongst others.

**ENR312 - Control Engineering Laboratory**  
**Credits: 1.5**

The Control Theory Lab complements the control

engineering fundamentals course by covering controller analysis and synthesis techniques. It focuses on Linear time-invariant (LTI) systems using ordinary differential equations, and Laplace transform for open-loop system analysis. The lab explores feedback, linear systems, transfer functions, and Laplace transforms, emphasising stability, feedback, and design tools for transient and steady-state responses. Additionally, it introduces students to MATLAB and Simulink through practical experiences in laboratory experiments and a hands-on control design project, ensuring a comprehensive understanding of control engineering principles.

**ENR314 - Power Generation Technologies**  
**Credits: 3**

This course introduces the science and technologies deployed for electric power generation. The thermal route for generation will introduce fossil-fuelled (coal, oil, and gas), solar thermal, geothermal, ocean thermal, nuclear, and plants. The fluid flow-based systems will discuss hydroelectric, wind, tidal, and ocean-based generation. Direct conversion methods, such as Solar photovoltaics, Magnetohydrodynamics, and fuel cells, will be covered. The use of biomass, combined cycle, cogeneration, and tri-generation systems will be analysed. The use of renewable sources, e.g., biogas, waste, will be touched upon. All throughout, the environmental impact and sustainability aspects will be incorporated. Students will be able to connect basic concepts with their engineering realizations and appreciate the advantages and limitations. The electric power grid will be introduced along with generation forecasting, scheduling, and costing, under different scenarios.

**ENR315 - Corrosion Science and Engineering**

**Credits: 3**

Any degradation of material due to the environment is called corrosion. Corrosion affects the life of equipment, plant and its structure, buildings and monuments, etc. It can also lead to catastrophic failure. Though corrosion is a spontaneous process, but with a better understanding of corrosion science it is possible to reduce the rate of corrosion and thus prolong the life of equipment, etc and prevent material loss and failure. The course will impart an understanding the science of corrosion phenomena, the factors responsible for corrosion, and design of corrosion mitigation strategies.

**ENR486 - BTech Thesis-1  
Credits: 3****ENR508 - Mobile Robots, Let's Build One!  
Credits: 3**

“Mobile Robots, Let's Build One!” is a hands-on (Enable) course. These robots are different from other classes of robots in many ways. This is a course to introduce the students to different aspects of control for mobile robots. How to control them and make them move around safely and effectively. They start from the basis and finally will end up with a physical moving robot. In this path they will be familiarized with Kinematic and Dynamic of mobile robots, different aspects of robot perception, after a review of control theory and systems they will be introduced to hybrid automata and its components. They go through the theory behind localization and navigation which will lead them to motion planning, after which the practical part of the course will begin. The robot building will bring up such topics as hardware and software used for making a mobile robot and running it.

**ENR704 - Collaborative Research Project - I  
Credits: 3****ENR705 - Collaborative Research Project - II  
Credits: 3****ENR709 - Research Methodology in Engineering  
Credits: 3**

This course introduces graduate students and research scholars in engineering and other disciplines, to foundations of research, identifying a research problem, various research methods and selection of an appropriate method, the process of interpretation of results, the art of scientific writing and presentation, research ethics and multi-disciplinary research.

**MAT101 - Discrete Mathematics  
Credits: 3**

This course provides introduction to the essential concepts of discrete mathematics that are necessary for practicing engineers and scientists and for higher level studies in computer science, mathematics and logic. Included topics are predicate calculus, methods of proofs, sets, counting, sequences, recurrence and graphs.

**MAT103 - Calculus  
Credits: 3**

This course on Calculus introduces problem solving through exposing the students to problems in differential and integral calculus. The course builds on the knowledge of the students in calculus obtained in school. The course also helps students to apply various techniques in proving

various fundamental theorems in calculus. After quickly covering the topics related with single variable calculus, focus would be on multivariate calculus along with its applications. The course will cover differential equations with solutions and constrained extrema with applications. This course also helps to understand convergence of sequences that is crucial to the study of algorithms and their complexity.

**MAT203 - Differential Equations and Linear Algebra  
Credits: 3**

The course has two components – Differential Equations and Linear Algebra. In Differential Equations, the course will introduce students to the concept of differential equations, how they arise in real life situations and their importance in Mathematical modelling. We will then concentrate on methods of solving first order equations and second order linear equations. Linear Algebra will take the students through to solving a system of linear equations – concept of Null Space, Row space of a matrix, Rank of a matrix. Concept of Vector spaces will be introduced and discussed in detail with emphasis on basis and dimension and linear transforms from one Vector space to another. Projection of a vector onto a vector space and its use in Least Squares Approximations will be discussed. The eigenvalues and eigenvectors of matrices will be introduced and their usefulness in diagonalization will be discussed. If time permits, the Singular Value decomposition will be discussed

**MAT248 - Applied Linear Algebra  
Credits: 3**

This is a core course on Linear Algebra for

undergraduate students of Computer Science and Engineering. In addition to introducing the basic concepts of Linear Algebra, the course attempts to illustrate computer science specific applications.

### **MAT283 - Calculus**

**Credits: 3**

This is the first course in mathematics taken by all engineering students, BS (Physics) students and anyone else who is interested in basic techniques of differential calculus of one and many variables. The course is highly applications oriented. Graphical visualization will be encouraged. Python code will be shared with interested students. The emphasis is on engineering and physics applications. The major topics covered are vectors, dot products, determinants, matrices, review of single variable calculus, continuity, differentiability, limits, Taylor and McLaurin series, convergence, partial derivatives, chain rules, extremum values, gradient, directional derivatives, Lagrange's multipliers Integral Calculus: Double integrals, polar coordinates, change of variables, Line integrals in plane, conservative fields, Gradient fields and potential, Integral theorem for Gradients, Spherical and Cylindrical Polar coordinates, Divergence and Curl, Gauss's theorem and Stokes' theorem, Examples of triple integrals in polar coordinates

### **MEC205 - Materials and Process of Manufacture**

**Credits: 3**

• General Introduction, Design for Manufacture, The Design Process, Selecting Materials and Manufacturing Process, Product quality, Manufacturing automation, Economics of Manufacture. • Casting processes, Solidification of Metals, Cast Structures, Casting Alloys, Ingot

Casting and Continuous Casting, Casting Processes, Expendable Mold, Permanent Mold, Processing of Casting and Casting Design. • Bulk deformation processes, Forging, Rolling, Cold and hot Extrusion, Rod, Wire and Tube Drawing, Die Manufacturing Methods, Die Failures. • Sheet-metal forming processes, Sheet-Metal Characteristics, Shearing, Bending of Sheet and Plate, Stretch Forming, Bulging, Deep-Drawing, Formability of Sheet Metals • Material Removal Processes (Milling, Turning), Mechanics of Chip Formation, Tool Wear, Surface Finish and Integrity, Cutting-Tool Materials, Cutting Fluids, Cutting Processes and Machine Tools for Producing Round Shapes, Machining Centers. • Material joining processes (welding, soldering, brazing, etc.)

### **MEC207 - Materials and Manufacturing Processes-I**

**Credits: 2**

The course introduces the students to the connection between materials, their properties, and manufacturing processes for engineering materials. The students will understand the choice of manufacturing processes based on the properties of the selected material, which can be metals, alloys, ceramics, polymers, or composites. The broad topics of manufacturing processes to be covered in this part I of the course are shaping (casting, forming, moulding, powder processing) and joining processes. The fundamental mechanics and underlying physical principles of these manufacturing processes will be taught by giving practical examples. The students will appreciate the choice of the manufacturing processes by comparing their advantages and limitations.

MEC208 - Materials and Manufacturing Processes-II Credits: 2 The broad topics

of manufacturing processes to be covered in this, part II of the course are material removal processes and operations, machine tools, and advanced manufacturing processes for specific applications. The fundamental mechanics and underlying physical principles of these manufacturing processes will be taught by giving practical examples. The students will appreciate the choice of the manufacturing process by comparing their advantages and limitations.

### **MEC303 - Thermal Energy Systems**

**Credits: 3**

Thermal Energy Systems course deals with the study of heat/power producing/consuming machines. It covers steam cycle, steam turbine, gas turbine, compressors and steam generators. It also covers the relevant cycle and combined cycle based power plant study. These machines are critical parts of the current power generating units. MEC305 - Thermodynamics and Energy Conversion Credits: 3 This course builds up on a basic thermodynamics course and covers thermodynamics behaviour of gas mixtures, hydrocarbon fuel characterization and their combustion, psychrometry and behaviour of humid air, basics compressible flow and shocks, and fundamentals of turbomachines. Hydraulic turbines and pumps are covered along with their piping systems and considerations of cavitation. Thermodynamics and engineering of fuel cells and electrolyzers are also introduced. Basics of phase and chemical equilibrium are also discussed. All topics are extensively illustrated with connections to engineering practices and societal issues. Impact on carbon dioxide emissions and sustainable energy possibilities are related to the topics.

### **MEC403 - Manufacturing Systems and**

**Operations**  
**Credits: 2**

The course will introduce students to different aspects relating to manufacturing systems that complement the processes of design and manufacturing across a variety of industrial sectors. Topics include manufacturing strategy, manufacturing flexibility, manufacturing complexity, investment decisions using life cycle costing, system reliability and maintenance models, economic design of quality control plans, single and mixed model assembly line balancing, shop floor scheduling algorithms, lot sizing and inventory control models, performance modelling of manufacturing systems. Practical examples will include experiments on the design of optimal acceptance sampling plans, design of optimal control charts, simulation of process failures, simulation of machine failures and simulation of job shops and production lines with various production control.

**MEC404 - Integrated Mechanical Laboratory II**  
**Credits: 2**

Develop hands-on skills in conducting mechanical engineering experiments. Understand and apply core principles in solid mechanics, fluid dynamics, and thermodynamics. Learn to design, execute, and analyze experiments with precision and accuracy. Foster critical thinking and problem-solving abilities in a lab setting. Enhance teamwork, communication, and technical reporting skills. Cultivate an appreciation for the role of experimentation in engineering innovation.

**MEC405 - Learning Factory Project**  
**Credits: 3**

**MEC700 - Advanced Materials and Manufacturing Processes**  
**Credits: 3**

This course aims to build a fundamental- and application-level understanding of how materials innovations are connected to manufacturing process innovations. The need-driven emerging engineering materials (categorized into metal alloys, polymers, ceramics, composites, semiconductors, and biomaterials) shall be discussed at their structural scale. The physical, chemical, mechanical, electrical, and thermal properties, along with the environmental impact of the materials, govern the choice of present-day manufacturing processes for shaping, joining, removal, and regeneration of the materials. Materials to be discussed include advanced composites, high entropy alloys, smart materials, nanomaterials, bio-materials, powder materials, and superalloys. Manufacturing processes to be addressed include non-traditional manufacturing processes, 3D/4D printing, micro-/nano-manufacturing processes, hybrid manufacturing, green/sustainable manufacturing, and intelligent manufacturing processes. The course sessions will also comprise a briefing and discussion of recent research papers of high impact in the field of materials and manufacturing technologies. Through this process, the students will learn the aspects of new materials development, innovations in manufacturing processes, and related advanced materials characterization techniques, including but not limited to SEM, EBSD, TEM, DIC, XRD, and AFM. This course will develop innovative thinking in mechanical engineering doctoral students and build a solid foundation in the experimental aspects of materials and manufacturing processes, which are necessary for their research career in the mechanical engineering domain.

**THE670 – Thesis/Project Progress Assessment - I**  
**Credits: 3**

**THE671 - Thesis / Project Progress Assessment - 2**  
**Credits: 2**

**THE672 - Thesis / Project Progress Assessment – 3**  
**Credits: 3**

**THE673 - Thesis / Project Progress Assessment - 4**  
**Credits: 4**

**School of Public Health**

**EPI610 - Environmental Health**  
**Credits: 3**

There are two sections. The course starts with the Sustainable Development Goals (SDGs), which highlight global priorities for environmental protection and public health. This sets the context for the second part of the course, where students learn how specific environmental exposures affect health and how to assess risks, study pollutants, and think about practical solutions. Section 1: SDGs: This is an interdisciplinary course focusing broadly on the the Sustainable Development Goals (SDGs) set by the UNEP, with a specific focus on environmental, health, and urban sustainability issues. Each session will focus on a thematic area and discuss the drivers of change, solutions and enabling factors using global case studies. Section 2: Impact of Environment on Health: This course explores the impact of environmental factors on human health, covering topics such as air and water pollution, toxicology,

climate change, and occupational hazards. Students will learn about exposure pathways, measurement techniques, health risks and mitigation strategies. A lab visit will introduce students to modern analytical techniques/methods used in environmental pollution assessment.

### **EPI611 - Principles of Epidemiology** **Credits: 3**

Students will be introduced to the fundamental concepts and methods of epidemiology. The course will cover epidemiological methods, concepts and terminologies, the distribution and determinants of health and disease in populations, and epidemiology's role in public health practice. Topics will include study designs, disease frequency and association measures, introductory knowledge of some communicable and non-communicable diseases, occupational health, mental health, environment and health, health and society, community health with special emphasis on India, and the use of epidemiological evidence in health policy and prevention strategies. Students will develop the skills to evaluate and apply epidemiological methods to real-world health issues through lectures, discussions, assignments, and group projects.

### **EPI701 - Study design and proposal writing for population based research** **Credits: 3**

This course focuses on designing population-based research studies and proposal development. It covers a wide range of topics from formulating research questions that stem from societal problems, conducting literature reviews to understand gaps, and designing different types of observational studies and intervention studies. Students will alongside write sections of a

research proposal.

### **EPI702 - Conducting Population-Based Research** **Credits: 3**

This course offers hands-on training in applying epidemiological principles to conduct population-based research, encompassing questionnaire design, developing data collection tools, ethical considerations, sampling in the field setting, study participant recruitment and retention, interviewing, clinical assessment techniques, research team and field data management.

### **EPI703 - Epidemiological Data Analysis** **Credits: 3**

This course introduces students to advanced statistical methods and data analysis techniques in epidemiology. It covers a range of topics from basic descriptive statistics to complex models. The course includes practical applications and projects that use real-world data to solve epidemiological problems.

### **EPI711 - Infectious Disease Epidemiology** **Credits: 3**

Infectious disease epidemiology studies the occurrence of infectious diseases; factors leading to infection by an organism; factors affecting transmission of an organism; and factors associated with clinically recognizable diseases among those infected. It requires the use of traditional epidemiologic methods as well as methods unique to infectious disease epidemiology, such as mathematical modelling. This course is designed to provide an introduction to infectious disease epidemiology. It will focus on the tools and methods used in identifying,

preventing, and controlling infectious diseases to improve public health. Case studies based on the literature and the work of faculty members will be used to illustrate the real-world application of these tools and methods to address public health problems.

### **EPI712 - Noncommunicable Disease** **Credits: 3**

The course will cover several aspects of noncommunicable disease (NCD). We will start with an overview of NCD burden, and general methods for assessing NCD in individuals and populations, including opportunities and challenges in descriptive epidemiology and surveillance. We will then move on to the Epidemiology of major NCD outcomes including descriptive epidemiology, risk and preventive factors and gaps areas for research. We will also provide an overview of few key risk and preventive factors and cover methodological approaches and challenges. Given the span of the domain knowledge and methods that is entailed in teaching this course, it will be offered in hybrid format, engaging various domain experts in person and online for specific NCDs and risk/preventive factors.

### **Undergraduate College**

### **FDP101 - Democracy and Justice** **Credits: 3**

It may be argued that democracy has emerged as the most desirable, if not the most successful, form of government in the contemporary world. Regardless of whether we like a particular democracy or not, arguments about what is the most legitimate and just form of rule point towards democracy. Why is democracy seen as

the most just form of rule? How did such a situation come about historically? Is there evidence to show that, all things considered, democracies are indeed the most just form of government known to us? Are there specific civic virtues that help democracies flourish? Is there a particular way in which agreement, dissent, cooperation, and conversation between different groups and individuals in a democratic society is to be carried out? Would democracy be a necessary component of a just system of government? And would social justice be a necessary component of democratic government? These are some of the questions that this course will tackle. The entire course is built on two central ideas about democracy: a) how best to safeguard against arbitrary exercise of state power, and b) how best cultivate the virtue of democratic conversation. The course is divided into four taught modules and a fifth project module. Each of the four modules are built around a normative statement, which is supposed to provoke and organise the discussions within that module. The four normative statements are: Module 1: "Democracy is the most just form of government" Module 2: "Rights take precedence over popular will" Module 3: "Inequality is antithetical to democracy"

### **FDP102 - Environment and Climate Change Credits: 3**

Since time immemorial, human activities have significantly impacted the nature of our planet. Issues such as depleting resources, climate extremes, land degradation, food insecurity, unsustainable consumption and unequal access to resources, pollution, ecosystem degradation and extinction of species have posed challenges of sustainability that span spatial and temporal scales. However, in the recent past, efforts related

to conservation and sustainability have also increased manifold, paving the way for a slightly hopeful future. On the crossroads of these vectors, multiple questions such as: what are the sustainability challenges facing humanity? How do we measure environmental footprints? How do we assess uncertainties and risks? Who bears the burden of costs and risks? Can we make our consumption behavior sustainable? How do we create, replicate and upscale innovative ideas? How do we evolve a just governance system to share costs and benefits equitably?, etc. need to be addressed and answered. The millennials must be equipped to comprehend and answer these questions in a meaningful and an engaging manner. This course, through an integration of diverse domains - materials, data science, biology and life, behaviour, communication, and constitution and civilization, will expose students to 1. Appreciate and develop an integrated understanding of these issues and their interactions, 2.

### **FDP104 – Water Credits: 3**

The two extreme points from where we look at water could be "Water is life, and clean water means health" - Audrey Hepburn, or an extremely scary angle e.g., "World War III will be fought over water"- Special Broadcasting Service (Aug 17, 2017). Both highlight the urgency for us to act - as citizens and as scientists. However, how much do we think of water? How much do we know of this resource apart from what we have read in our school textbooks? Is the water crisis real? Are we taking the right decisions today to secure a better future for the coming generations? How can I, as an individual and as a community participate in the process? Also, as the driver for all forms of life on earth, water is an excellent solvent, however,

this excellent solvent's characteristic, when combined with its flow, makes it a potent carrier of pollutants and pathogenic microorganisms that are often harmful to health. So, what makes water safe to consume and use for many other purposes? Is the water in surface and groundwater bodies in the Ahmedabad area safe for all forms of life? Is it potable? This course will turn students into aware citizens of the country by enabling them to ask relevant questions around the subject of water.

### **VOL100 - Engagement with Society Credits: 0**

Young people learn most by direct experiences. It is important to give young people access to volunteering opportunities. If these opportunities can be linked to their curriculum, they gain an integrated way of doing this. The value of blending community service and a liberal education can be manifold. This course gives an opportunity to students to participate and get involved in non-profit/non-governmental organisations across the city. Physical work is stressed as it gives students a chance to step into new situations and contexts. The Student Volunteer Programme at Ahmedabad University aims to provide the student community an intense, authentic and meaningful experience in giving, voluntary service and building citizenship. Please read more about the programme in the document 'Student Volunteer Programme' on the AURIS portal, under University Resources --> Documents/Policies/Forms.

### **VOL101 - Engagement with Society Credits: 3**

This course aims to immerse students in the world of volunteerism, where they will actively engage with communities, NGOs, and civic organisations

to address societal challenges. It offers experiential learning for young individuals by providing access to valuable volunteering opportunities. By integrating these opportunities into the curriculum, students benefit from a holistic educational experience that combines community service with a liberal education, yielding numerous advantages. Students in this course will engage with non-profit and non-governmental organisations across the city, with a focus on 45 hours of fieldwork and community interaction. This approach allows students to navigate diverse situations and contexts, enhancing their practical skills and adaptability. Completion of this course is a graduation requirement, ensuring that all students gain a profound, authentic, and meaningful experience in volunteer service, thereby fostering a strong sense of citizenship. For further information about the programme, please refer to the document titled 'Student Volunteer Programme' available on the AURIS portal under University Resources --> Documents/Policies/Forms.

**WEL109 - Sports & Wellness: Volleyball**  
**Credits: 1.5**

**WEL110 - Sports & Wellness: Yoga**  
**Credits: 1.5**

**WEL100 - Sports & Wellness: Athletics**  
**Credits: 1.5**

**WEL101 - Sports & Wellness: Badminton**  
**Credits: 1.5**

**WEL102 - Sports & Wellness: Basketball**  
**Credits: 1.5**

**WEL103 - Sports & Wellness: Cricket**  
**Credits: 1.5**

**WEL104 - Sports & Wellness: Football**  
**Credits: 1.5**

**WEL105 - Sports & Wellness: Frisbee**  
**Credits: 1.5**