Ahmedabad University

Course Catalogue
2024-2025

Ahmedabad University Course Catalogue

Contents:

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 andcompassionate 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 andassumptions of each other through data and rigorous discussions, and collaborating to develop insights.

Academic Calendar 2024-25 for Returning Students of all Programmes and Incoming Students of Graduate Programmes

Monsoon Semester	
First Day of Classes	August 01, 2024
Mid Semester Examination Period	September 21 - 29, 2024
Diwali Break	October 31 - November 03, 2024
Quiet Reading Period	November 27 - December 01, 2024
End Semester Examination Period	December 02 - 10, 2024
Semester Break	December 11, 2024 - January 05, 2025
Independent Study Period	December 11, 2024 - January 05, 2025
Winter Semester	
First Day of Classes	January 06, 2025
Mid Semester Examination Period	March 01 - 09, 2025
Quiet Reading Period	April 19 - 25, 2025
End Semester Examination Period	April 26 - May 04, 2025
Summer Term	
First Day of Classes	May 12, 2025
Mid Term Examination Period	Week 4, during class hours
End Term Examination Period	July 05 - July 09, 2025
Summer Break and Internship Period	May 05 - July 25, 2025

Academic Calendar 2024-25 for Incoming Students of Undergraduate and Integrated Masters Programmes

Orientation	July 25 - 28, 2024
Monsoon Semester	
First Day of Classes	July 29, 2024
Foundation Programme Begins	July 29, 2024; August 05, 2024
Foundation Programme Ends	September 25, 2024; September 27, 2024
Mid Semester Examination Period	September 21 - 22 & September 28 - 29, 2024
Bi-Semester Courses Begin	September 30, 2024
Diwali Break	October 31 - November 03, 2024
Mid Bi-Semester / Monsoon End Semester Examination Period	December 02 - 10, 2024
Semester Break	December 11, 2024 - January 05, 2025
Independent Study Period	December 11, 2024 - January 05, 2025
Winter Semester	
First Day of Classes	January 06, 2025
Quiet Reading Period for Bi-Semester Courses	February 26 - 28, 2025
Mid Semester / End Bi-Semester Examination Period	March 01 - 09, 2025
Foundation Programme Begins	March 10, 2025; March 17, 2025
Foundation Programme Ends	April 23, 2025; April 25, 2025
Quiet Reading Period	April 19 - 25, 2025
End Semester Examination Period	April 26 - May 04, 2025
Summer Term	
First Day of Classes	May 12, 2025
Mid Term Examination Period	Week 4, during class hours
End Term Examination Period	July 05 - 09, 2025
Summer Break and Internship Period	May 05 - July 25, 2025

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 Businees Administration (Honours)
Professor Kunal Mankodi
Email: kunal.mankodi@ahduni.edu.in

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

Integrated Master of Business Administration
Professor Amrita Bihani
Email: 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

Master of Arts in Economics
Professor Jeemol Unni
Email: jeemol.unni@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: aditya.kanth@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 Aparajith Ramnath
Email: aparajith.ramnath@ahduni.edu.in

Bachelor of Science (Honours)
Professor Souvik SenGupta
Email: souvik.sengupta@ahduni.edu.in

Integrated Master of Science in Life Sciences
Professor Souvik SenGupta

Email: souvik.sengupta@ahduni.edu.in

School of Engineering and Applied Science

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

Programme Chair

Bachelor of TechnologyProfessor Sridhar Dalai
Email: sridhar.dalai@ahduni.edu.in

Master of Technology in Computer
Science and EngineeringProfessor
Professor Jayendra Bhalodiya
Email: jayendra.bhalodiya@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 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 2024

Sr. No.	School	Course	Credits	Prerequisites	Section	Instructor	Time and Day
1	AMSOM	COM101 Effective Reading and Comprehension Skills	3		1	Preeti Maneck	08:00 am - 09:30 am Mon, Wed
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	Pallavi Narayan	04:00 pm - 05:30 pm Tue, Thu
4	AMSOM	COM101 Effective Reading and Comprehension Skills	3		4	Parijat Pandya	08:00 am - 09:30 am Tue, Thu
5	AMSOM	COM101 Effective Reading and Comprehension Skills	3		5	Gatha Joshipura	08:00 am - 09:30 am Mon, Wed
6	AMSOM	COM101 Effective Reading and Comprehension Skills	3		6	Jalaj Singh	05:30 pm - 07:00 pm Tue, Thu
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	Nirzari Pandit	04:00 pm - 05:30 pm Mon, Fri
9	AMSOM	COM101 Effective Reading and Comprehension Skills	3		9	Purabi Bhattacharya	04:00 pm - 05:30 pm Mon, Fri
10	AMSOM	COM101 Effective Reading and Comprehension Skills	3		10	Purabi Bhattacharya	08:00 am - 09:30 am Mon, Fri
11	AMSOM	COM101 Effective Reading and Comprehension Skills	3		11	Parijat Pandya	04:00 pm - 05:30 pm Mon, Fri
12	AMSOM	COM101 Effective Reading and Comprehension Skills [Bi-Semester]	3		12	Preeti Maneck	09:30 am - 11:00 am Mon, Wed
13	AMSOM	COM101 Effective Reading and Comprehension Skills [Bi-Semester]	3		13	Preeti Maneck	09:30 am - 11:00 am Tue, Thu
14	AMSOM	COM101 Effective Reading and Comprehension Skills [Bi-Semester]	3		15	Chirag Trivedi	02:30 pm - 04:00 pm Mon, Fri

15	AMSOM	COM101 Effective Reading and Comprehension Skills [Bi-Semester]	3		16	Pallavi Narayan	02:30 pm - 04:00 pm Tue, Thu
16	AMSOM	COM102 Advanced Writing	3		1	Jalaj Singh	08:00 am - 09:30 am Mon, Wed
17	AMSOM	COM102 Advanced Writing	3		2	Jalaj Singh	08:00 am - 09:30 am Tue, Thu
18	AMSOM	COM102 Advanced Writing	3		4	Purabi Bhattacharya	08:00 am - 09:30 am Tue, Thu
19	AMSOM	COM102 Advanced Writing	3		5	Parijat Pandya	08:00 am - 09:30 am Mon, Wed
20	AMSOM	COM102 Advanced Writing	3		6	Gatha Joshipura	08:00 am - 09:30 am Tue, Thu
21	AMSOM	COM102 Advanced Writing	3		7	Parijat Pandya	04:00 pm - 05:30 pm Tue, Thu
22	AMSOM	COM102 Advanced Writing	3		8	Gatha Joshipura	04:00 pm - 05:30 pm Mon, Fri
23	AMSOM	COM102 Advanced Writing	3		9	Tana Trivedi	08:00 am - 09:30 am Tue, Thu
24	AMSOM	COM115 Gender Sensitization	3		1	Chirag Trivedi	05:30 pm - 07:00 pm Mon, Fri
25	AMSOM	COM202 City as Text	3	COM101 Effective Reading and Comprehension Skills	1	Sudhir Pandey	04:00 pm - 05:30 pm Tue, Thu
26	AMSOM	COM211 Science Communication using Digital Media	3		1	Tana Trivedi Bhumi Shah	04:00 pm - 05:30 pm Tue, Thu
27	AMSOM	COM501 Managerial Communication	1.5	OR None	1	Tana Trivedi	11:00 am - 12:30 pm Fri
28	AMSOM	COM501 Managerial Communication	1.5	OR None	2	Sudhir Pandey	01:00 pm - 02:30 pm Fri
29	AMSOM	COM506 Culture and Communication	1.5		1	Chirag Trivedi	04:00 pm - 05:30 pm Mon
30	AMSOM	COM508 Communication Lab II	0.75	None	1	Sudhir Pandey	01:00 pm - 02:30 pm Tue
31	AMSOM	COM508 Communication Lab II	0.75	None	2	Sudhir Pandey	01:00 pm - 02:30 pm Thu
32	AMSOM	COM511 Journalism and Engaging with Media	1.5		1	Shyam Parekh	09:30 am - 11:00 am Tue, Thu, Fri, 11:00 am - 12:30 pm Fri
33	AMSOM	COM701 Research Writing	3	None	1	Tana Trivedi	11:00 am - 12:30 pm Tue, Thu
34	AMSOM	DES101 Fundamentals of Design	3		1	Umang Shah	07:00 pm - 08:30 pm Mon, Fri
35	AMSOM	DES102 Visual Communication and Graphic Design	3		1	Jalp Lakhia	08:00 am - 09:30 am Wed, Fri

36	AMSOM	DES103 Biomimicry With Playfulness	3		1	Hemant Wala	05:30 pm - 07:00 pm Tue, Thu
37	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
38	AMSOM	DES202 Interaction Design and User Experience	3		1	Fenil Shah	04:00 pm - 05:30 pm Tue, Thu
39	AMSOM	DES203 Design Thinking and Problem Solving	3		1	Fenil Shah	02:30 pm - 04:00 pm Tue, Thu
40	AMSOM	DGT201 Interactive Media and Visualisation	3		1	Bhumi Shah	08:00 am - 09:30 am Tue, Thu
41	AMSOM	ECO100 Microeconomics	3		1	Gaurav Bhattacharya	04:00 pm - 05:30 pm Tue, Thu
42	AMSOM	ECO100 Microeconomics [Bi-Semester]	3		2	Rakesh Chaturvedi	09:30 am - 11:00 am Mon, Fri
43	AMSOM	ECO100 Microeconomics [Bi-Semester]	3		3	Sonal Yadav	11:00 am - 12:30 pm Mon, Wed
44	AMSOM	ECO100 Microeconomics [Bi-Semester]	3		4	Sabyasachi Das	11:00 am - 12:30 pm Mon, Fri
45	AMSOM	ECO100 Microeconomics [Bi-Semester]	3		5	Aranya Chakraborty	11:00 am - 12:30 pm Tue, Thu
46	AMSOM	ECO100 Microeconomics [Bi-Semester]	3		6	Sonal Yadav	01:00 pm - 02:30 pm Mon, Wed
47	AMSOM	ECO100 Microeconomics [Bi-Semester]	3		7	Sugat Chaturvedi	09:30 am - 11:00 am Tue, Thu
48	AMSOM	ECO110 Macroeconomics	3		1	Amol Agrawal	01:00 pm - 02:30 pm Mon, Wed
49	AMSOM	ECO110 Macroeconomics	3		2	Abhitesh Ranjan	01:00 pm - 02:30 pm Tue, Thu
50	AMSOM	ECO110 Macroeconomics	3		3	Rahul Rao	09:30 am - 11:00 am Mon, Wed
51	AMSOM	ECO110 Macroeconomics	3		4	Atman Shah	04:00 pm - 05:30 pm Tue, Thu
52	AMSOM	ECO110 Macroeconomics	3		5	Abhitesh Ranjan	04:00 pm - 05:30 pm Tue, Thu
53	AMSOM	ECO200 Managerial Economics	3		1	Rahul Singh	05:30 pm - 07:00 pm Mon, Fri
54	AMSOM	ECO201 Intermediate Microeconomics	3	EPP100 Microeconomics, OR	1	Sabyasachi Das	09:30 am - 11:00 am Mon, Wed

55	AMSOM	ECO220 Econometrics	3	EPP100 Microeconomics,MAT142 Introductory Calculus,STA101 Statistics,,MAT142 Introductory Calculus,STA101 Statistics, OR ECO200 Managerial Economics,MAT142 Introductory Calculus,STA101 Statistics,STA 302 Mathematical Statistics	1	Aranya Chakraborty	11:00 am - 12:30 pm Mon, Fri
56	AMSOM	ECO250 History of Economic Thought	3	EPP100 Microeconomics,EPP110 Macroeconomics	1	Amol Agrawal	04:00 pm - 05:30 pm Tue, Thu
57	AMSOM	ECO280 Indian Economy: Performance and Policies	3	EPP100 Microeconomics, OR ECO200 Managerial Economics	1	Sonal Yadav	01:00 pm - 02:30 pm Tue, Thu
58	AMSOM	ECO292 Machine Learning for Policy	3		1	Sugat Chaturvedi	02:30 pm - 04:00 pm Mon, Fri
59	AMSOM	ECO500 Economics For Managers	3		1	Rahul Singh	11:00 am - 12:30 pm Tue, Thu
60	AMSOM	ECO500 Economics For Managers	3		2	Rahul Singh	04:00 pm - 05:30 pm Tue, Thu
61	AMSOM	ECO501 Intermediate Microeconomics	3		1	Rakesh Chaturvedi	11:00 am - 12:30 pm Mon, Fri
62	AMSOM	ECO511 Intermediate Macroeconomics	3		1	Rahul Rao	09:30 am - 11:00 am Tue, Thu
63	AMSOM	ECO544 Urban Informal Economy [First Quarter]	1.5	EPP100 Microeconomics, OR	1	Jeemol Unni	01:00 pm - 02:30 pm Mon, Fri
64	AMSOM	ECO592 Machine Learning for Policy	3		1	Sugat Chaturvedi	02:30 pm - 04:00 pm Mon, Fri
65	AMSOM	ENV210 Energy and Climate Change	3		1	Supratim Das Gupta	05:30 pm - 07:00 pm Mon, Fri
66	AMSOM	ENV501 Environment and Sustainability [Second Quarter]	1		1	Minal Pathak	09:30 am - 11:00 am Mon, Wed

67	AMSOM	ENV501 Environment and Sustainability [Second Quarter]	1		2	Minal Pathak	09:30 am - 11:00 am Tue, Thu
68	AMSOM	ENV502 Sustainable Development Goals	3		1	Minal Pathak	11:00 am - 12:30 pm Tue, Thu
69	AMSOM	ENV591 Sustainability and Circular Economy	1.5	EPP100 Microeconomics, OR EPP110 Macroeconomics	1	Supratim Das Gupta	01:00 pm - 02:30 pm Wed, Fri
70	AMSOM	ENV801 Energy-Environment Assessment Models and Applications	3	ENV601 Environment Sustainability & Climate Change	1	Minal Pathak	08:00 am - 09:30 am Mon, Wed
71	AMSOM	ETH201 Ethics	3		1	Nimit Thaker Chirag Trivedi	02:30 pm - 04:00 pm Tue, Thu
72	AMSOM	ETH201 Ethics	3		2	Nimit Thaker Chirag Trivedi	05:30 pm - 07:00 pm Tue, Thu
73	AMSOM	ETH201 Ethics	3		3	Nimit Thaker Chirag Trivedi	01:00 pm - 02:30 pm Tue, Thu
74	AMSOM	ETH201 Ethics	3		4	Nimit Thaker Chirag Trivedi	05:30 pm - 07:00 pm Sat
75	AMSOM	FAC104 Tally ERP 9.0	2	FAC114 Financial Accounting OR None	1	Rakesh Sharma	08:00 am - 09:30 am Mon, Fri
76	AMSOM	FAC112 Corporate Accounting	3		1	Heli Shah	11:00 am - 12:30 pm Mon, Wed
77	AMSOM	FAC112 Corporate Accounting	3		2	Vibha Tripathi	01:00 pm - 02:30 pm Tue, Thu
78	AMSOM	FAC114 Financial Accounting	3		1	Mona Vora	11:00 am - 12:30 pm Mon, Fri, 08:00 am - 09:30 am Sat
79	AMSOM	FAC114 Financial Accounting	3		2	Heli Shah	09:30 am - 11:00 am Tue, Thu
80	AMSOM	FAC114 Financial Accounting [Bi-Semester]	3		3	Vaibhav Kadia	11:00 am - 12:30 pm Mon, Fri
81	AMSOM	FAC114 Financial Accounting [Bi-Semester]	3		4	Heli Shah	11:00 am - 12:30 pm Tue, Thu
82	AMSOM	FAC114 Financial Accounting [Bi-Semester]	3		5	Heli Shah	01:00 pm - 02:30 pm Mon, Wed
83	AMSOM	FAC114 Financial Accounting [Bi-Semester]	3		6	Binny Rawat	01:00 pm - 02:30 pm Tue, Thu
84	AMSOM	FAC114 Financial Accounting [Bi-Semester]	3		7	Binny Rawat	02:30 pm - 04:00 pm Mon, Fri

85	AMSOM	FAC121 Direct Taxes	3		1	Nimit Thaker	01:00 pm - 02:30 pm Mon, Fri
86	AMSOM	FAC121 Direct Taxes	3		2	Hemil Shah	09:30 am - 11:00 am Tue, Thu
87	AMSOM	FAC123 Audit and Assurance	3		1	Heli Shah	09:30 am - 11:00 am Mon, Wed
88	AMSOM	FAC124 Fundamentals of GST	1.5		2	Nimit Thaker	09:30 am - 11:00 am Sat
89	AMSOM	FAC124 Fundamentals of GST [First Quarter]	1.5		1	Nimit Thaker	04:00 pm - 05:30 pm Mon, Fri
90	AMSOM	FAC125 Business Taxation [Second Quarter]	1.5		1	Nimit Thaker	04:00 pm - 05:30 pm Mon, Fri
91	AMSOM	FAC133 Financial Management	3		1	Saumil Shah	11:00 am - 12:30 pm Mon, Wed
92	AMSOM	FAC133 Financial Management	3		2	Saumil Shah	01:00 pm - 02:30 pm Mon, Wed
93	AMSOM	FAC133 Financial Management	3		3	Saumil Shah	11:00 am - 12:30 pm Tue, Thu, 02:30 pm - 04:00 pm Sat
94	AMSOM	FAC133 Financial Management	3		4	Mona Vora	09:30 am - 11:00 am Tue, Thu
95	AMSOM	FAC133 Financial Management	3		5	Mona Vora	11:00 am - 12:30 pm Tue, Thu
96	AMSOM	FAC215 Cost & Management Accounting	3		1	Jinraj Joshipura	01:00 pm - 02:30 pm Mon, Fri
97	AMSOM	FAC215 Cost & Management Accounting	3		2	Binny Rawat	02:30 pm - 04:00 pm Tue, Thu
98	AMSOM	FAC225 Corporate Governance & Sustainability	3		1	Narendra Kushwaha	11:00 am - 12:30 pm Mon, Fri
99	AMSOM	FAC241 Banking	3	OR FAC133 Financial Management	1	Hetal Jhaveri	01:00 pm - 02:30 pm Mon, Wed
100	AMSOM	FAC244 Financial Markets	3	OR FAC131 Financial Management - I	1	Saumil Shah	01:00 pm - 02:30 pm Tue, Thu
101	AMSOM	FAC311 Analysing Corporate Annual Report	3		2	Vibha Tripathi	01:00 pm - 02:30 pm Wed, Fri
102	AMSOM	FAC331 Corporate Finance	3		1	Hetal Jhaveri	09:30 am - 11:00 am Tue, Thu
103	AMSOM	FAC336 Working Capital Strategy [First Quarter]	1.5		1	Binny Rawat	01:00 pm - 02:30 pm 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	,FAC215 Cost & Management Accounting	1	Poonam Dugar	11:00 am - 12:30 pm Mon, Wed
107	AMSOM	FAC513 Management Accounting [Second Quarter]	1.5	,FAC215 Cost & Management Accounting	2	Poonam Dugar	01:00 pm - 02:30 pm Mon, Wed
108	AMSOM	FAC534 Strategic Corporate Finance	3	FAC132 Financial Management - II,	1	Kinshuk Saurabh	09:30 am - 11:00 am Tue, Thu
109	AMSOM	FAC541 Financial Markets and Institutions	3	FAC331 Corporate Finance, OR	1	Sanjay Banerji	11:00 am - 12:30 pm Tue, Thu
110	AMSOM	FAC630 Behavioural Finance	3		1	Mayank Patel	08:00 am - 09:30 am Tue, Thu
111	AMSOM	FAC632 Corporate Restructuring Mergers and Acquisitions	3	OR FAC132 Financial Management - II	1	Kinshuk Saurabh	02:30 pm - 04:00 pm Tue, Thu
112	AMSOM	FAC633 Security Analysis and Portfolio Management	3	OR FAC533 Corporate Investments and Value Creation	1	Vinodh Madhavan	09:30 am - 11:00 am Mon, Wed
113	AMSOM	FAC634 International Finance	3	OR FAC533 Corporate Investments and Value Creation	1	Tanya Jain	01:00 pm - 02:30 pm Tue, Thu
114	AMSOM	FAC635 Financial Modelling	3	FAC132 Financial Management - II, OR	1	Mayank Patel	08:00 am - 09:30 am Wed, Fri
115	AMSOM	FAC636 Financial Econometrics	3		1	Vinodh Madhavan	11:00 am - 12:30 pm Mon, Wed
116	AMSOM	FBE101 Introduction to Entrepreneurship	1.5		1	Darshna Padia	01:00 pm - 02:30 pm Mon, Sat, 02:30 pm - 04:00 pm Sat
117	AMSOM	FBE502 Design Thinking [Second Quarter]	1.5		1	To Be Announced	09:30 am - 11:00 am Tue, Thu
118	AMSOM	FBE508 Intellectual Property Rights	3		1	Krishna Mehta	01:00 pm - 02:30 pm Mon, Wed
119	AMSOM	FBE511 Family Business Management and Policies [First Quarter]	1.5		1	Abhijit Kothari	05:30 pm - 07:00 pm Tue, Thu
120	AMSOM	FBE602 New Venture Creation	1.5		1	Anay Mashruwala	07:00 pm - 08:30 pm Mon, Fri

121	AMSOM	FBE603 Digital Entrepreneurship	3		1	Viral Nagori	09:30 am - 11:00 am Sat, 11:00 am - 12:30 pm Sat, Sun, 01:00 pm - 02:30 pm Sun
122	AMSOM	FBE608 Intellectual Property Management [Second Quarter]	1.5		1	Krishna Mehta	11:00 am - 12:30 pm Mon, Wed
123	AMSOM	HRT511 Heritage Discourses and Frameworks	3		1	Neel Chapagain Molly Kaushal	09:30 am - 11:00 am Mon, Wed, Fri, 11:00 am - 12:30 pm Mon, Wed, Fri
124	AMSOM	HRT512 Conservation Principles and Processes	1.5		1	Aditya Prakash Kanth	11:00 am - 12:30 pm Mon, Fri
125	AMSOM	HRT531 Cultural Resource Mapping & Documentation	3		1	Aditya Prakash Kanth	01:00 pm - 02:30 pm Tue, Thu, 02:30 pm - 04:00 pm Tue, Thu
126	AMSOM	HRT533 Heritage and Business: Designing Heritage Experiences	1.5	None	1	Ioannis Poulios	04:00 pm - 05:30 pm Tue, Thu, Fri
127	AMSOM	HRT634 Arts, Culture and Heritage – A Managerial Economics Perspective	3		1	A Damodaran	09:30 am - 11:00 am Tue, Thu, 11:00 am - 12:30 pm Tue, Thu, 01:00 pm - 02:30 pm Wed, 02:30 pm - 04:00 pm Wed
128	AMSOM	INS511 Perspective on Market Research Sector	1	None	1	Ravi Miglani	08:00 am - 09:30 am Sat
129	AMSOM	INS512 Perspective on Real Estate Sector [Second Quarter]	1		1	Parag Patel	09:30 am - 11:00 am Sat, 11:00 am - 12:30 pm Sat
130	AMSOM	INS514 Perspective on Banking [Second Quarter]	1		1	Hetal Jhaveri	02:30 pm - 04:00 pm Sat, 01:00 pm - 02:30 pm Sat
131	AMSOM	MGT111 Identity and Behaviour	3		1	Amrita Bihani	09:30 am - 11:00 am Mon, Wed
132	AMSOM	MGT111 Identity and Behaviour	3		2	Amrita Bihani	01:00 pm - 02:30 pm Mon, Wed
133	AMSOM	MGT111 Identity and Behaviour [Bi-Semester]	3		3	Jatin Christie	09:30 am - 11:00 am Mon, Fri
134	AMSOM	MGT111 Identity and Behaviour [Bi-Semester]	3		4	Jatin Christie	09:30 am - 11:00 am Tue, Thu

135	AMSOM	MGT111 Identity and Behaviour [Bi-Semester]	3		5	Shreshtha Dabral	09:30 am - 11:00 am Tue, Thu
136	AMSOM	MGT111 Identity and Behaviour [Bi-Semester]	3		6	Shreshtha Dabral	11:00 am - 12:30 pm Tue, Thu
137	AMSOM	MGT111 Identity and Behaviour [Bi-Semester]	3		7	Harnain Arora	01:00 pm - 02:30 pm Tue, Thu
138	AMSOM	MGT111 Identity and Behaviour [Bi-Semester]	3		8	Harnain Arora	02:30 pm - 04:00 pm Tue, Thu
139	AMSOM	MGT112 Organisation Processes	3		1	Purva Kacchy	08:00 am - 09:30 am Mon, Fri
140	AMSOM	MGT112 Organisation Processes	3		2	Shreshtha Dabral	09:30 am - 11:00 am Mon, Wed
141	AMSOM	MGT112 Organisation Processes	3		3	Shreshtha Dabral	11:00 am - 12:30 pm Mon, Wed
142	AMSOM	MGT112 Organisation Processes	3		4	Purva Kacchy	08:00 am - 09:30 am Tue, Thu
143	AMSOM	MGT112 Organisation Processes	3		5	Purva Kacchy	09:30 am - 11:00 am Mon, Fri
144	AMSOM	MGT121 Human Capital Management	3		1	Vedant Dev	02:30 pm - 04:00 pm Mon, Fri
145	AMSOM	MGT121 Human Capital Management	3		2	Vedant Dev	02:30 pm - 04:00 pm Tue, Thu
146	AMSOM	MGT121 Human Capital Management	3		3	Bhumi Trivedi	09:30 am - 11:00 am Tue, Thu
147	AMSOM	MGT121 Human Capital Management	3		4	Bhumi Trivedi	11:00 am - 12:30 pm Tue, Thu
148	AMSOM	MGT136 Indian Legal System [First Quarter]	1.5		1	Krishna Mehta	08:00 am - 09:30 am Tue, Thu
149	AMSOM	MGT136 Indian Legal System [Second Quarter]	1.5		2	Krishna Mehta	11:00 am - 12:30 pm Tue, Thu
150	AMSOM	MGT221 Strategic Human Resource Management	3	MGT121 Human Resource Management	1	Amrita Bihani	02:30 pm - 04:00 pm Tue, Thu
151	AMSOM	MGT223 Industrial Relations and Employment Laws	3	MGT121 Human Resource Management,MGT221 Strategic Human Resource Management	1	Nimit Thaker	05:30 pm - 07:00 pm Mon, Fri

152	AMSOM	MGT234 Civil & Property Laws	3		1	Krishna Mehta	01:00 pm - 02:30 pm Tue, Thu
153	AMSOM	MGT328 People Analytics	3		1	Rishi Jain	08:00 am - 09:30 am Wed, Fri
154	AMSOM	MGT341 Competitive Strategy [Second Quarter]	1.5		1	Kunal Mankodi	11:00 am - 12:30 pm Tue, Thu
155	AMSOM	MGT341 Competitive Strategy [Second Quarter]	1.5		2	Kunal Mankodi	02:30 pm - 04:00 pm Tue, Thu
156	AMSOM	MGT504 Behavioural Lab I	0.75		1	Ritu Raj	09:30 am - 11:00 am Fri
157	AMSOM	MGT504 Behavioural Lab I	0.75		2	Ritu Raj	11:00 am - 12:30 pm Fri
158	AMSOM	MGT505 Problem Solving for Social Change [First Quarter]	1.5		1	Sudhir Pandey	02:30 pm - 04:00 pm Mon, Fri
159	AMSOM	MGT505 Problem Solving for Social Change [First Quarter]	1.5		2	Sudhir Pandey	02:30 pm - 04:00 pm Tue, Thu
160	AMSOM	MGT506 Digital Thinking [First Quarter]	1.5		1	Prithwiraj Mukherjee	01:00 pm - 02:30 pm Tue, Thu
161	AMSOM	MGT506 Digital Thinking [Second Quarter]	1.5		2	Prithwiraj Mukherjee	01:00 pm - 02:30 pm Tue, Thu
162	AMSOM	MGT509 Business Models [Second Quarter]	1.5		1	Malhar Mehta	04:00 pm - 05:30 pm Tue, Thu
163	AMSOM	MGT509 Business Models [Second Quarter]	1.5		2	Malhar Mehta	05:30 pm - 07:00 pm Tue, Thu
164	AMSOM	MGT511 Organisational Behaviour [First Quarter]	1.5		1	Reena Shah	09:30 am - 11:00 am Mon, Wed
165	AMSOM	MGT511 Organisational Behaviour [First Quarter]	1.5		2	Reena Shah	11:00 am - 12:30 pm Mon, Wed
166	AMSOM	MGT513 Leadership	3	OR MGT112 Organisation Processes	1	Jatin Christie	02:30 pm - 04:00 pm Mon, Fri
167	AMSOM	MGT521 People Practices and Decision Making	1.5	OR MGT112 Organisation Processes	1	Ekta Sharma	09:30 am - 11:00 am Mon, Wed
168	AMSOM	MGT521 People Practices and Decision Making	1.5	OR MGT112 Organisation Processes	2	Ekta Sharma	09:30 am - 11:00 am Tue, Thu
169	AMSOM	MGT522 Strategic Human Resource Management	3	OR MGT 121 Human Capital Management	1	Amrita Bihani	02:30 pm - 04:00 pm Tue, Thu
170	AMSOM	MGT524 Dark Side of Organisation [First Quarter]	1.5		1	Benjamin Clarance	09:30 am - 11:00 am Mon, Fri

171	AMSOM	MGT532 Industrial Relations and Labour Laws	3	OR MGT121 Human Resource Management	1	Nimit Thaker	05:30 pm - 07:00 pm Mon, Fri
172	AMSOM	MGT621 Selection and Testing [First Quarter]	1.5	OR MGT121 Human Resource Management	1	Ekta Sharma	11:00 am - 12:30 pm Mon, Wed
173	AMSOM	MGT623 International HRM [Second Quarter]	1.5	MGT121 Human Resource Management, OR	1	Ekta Sharma	11:00 am - 12:30 pm Mon, Wed
174	AMSOM	MGT626 Sustainable Human Resource Management [First Quarter]	1.5	OR MGT521 Human Resource Management	1	Ekta Sharma	11:00 am - 12:30 pm Tue, Thu
175	AMSOM	MGT628 People Analytics	3	OR MGT521 Human Resource Management	1	Rishi Jain	08:00 am - 09:30 am Wed, Fri
176	AMSOM	MGT642 Strategies for Firms in Emerging Markets [First Quarter]	1.5	, OR MGT541 Business Strategy,MGT541 Competitive Strategy	1	Kunal Mankodi	08:00 am - 09:30 am Tue, Thu
177	AMSOM	MKT103 Marketing Management	3		1	Jinal Parikh	02:30 pm - 04:00 pm Mon, Fri
178	AMSOM	MKT103 Marketing Management	3		2	Zalak Shah	01:00 pm - 02:30 pm Mon, Fri
179	AMSOM	MKT103 Marketing Management	3		3	Mahendra Singh Rao	02:30 pm - 04:00 pm Tue, Thu
180	AMSOM	MKT103 Marketing Management	3		4	Atul Kumar	11:00 am - 12:30 pm Mon, Fri
181	AMSOM	MKT103 Marketing Management	3		5	Mahendra Singh Rao	11:00 am - 12:30 pm Tue, Thu
182	AMSOM	MKT312 Essentials of Marketing Research	3	OR MKT101 Marketing Management - I	1	Sujo Thomas	04:00 pm - 05:30 pm Tue, Thu
183	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
184	AMSOM	MKT324 Retail Management	3	OR MKT101 Marketing Management - I	1	Sujo Thomas	05:30 pm - 07:00 pm Tue, Thu
185	AMSOM	MKT341 Marketing Strategy for Consumer Behaviour	3		1	Zalak Shah	01:00 pm - 02:30 pm Tue, Thu
186	AMSOM	MKT352 Advertising: Crafting Contagious Content	3		1	Darshna Padia	05:30 pm - 07:00 pm Mon, Fri

187	AMSOM	MKT501 Products, Brands and Markets	3		1	Bijal Mehta	09:30 am - 11:00 am Tue, Thu
188	AMSOM	MKT501 Products, Brands and Markets	3		2	Bijal Mehta	01:00 pm - 02:30 pm Mon, Wed
189	AMSOM	MKT601 Business to Business Marketing	3	MKT101 Marketing Management - I,MKT102 Marketing Management - II, OR MKT103 Marketing Management	1	Zalak Shah	04:00 pm - 05:30 pm Fri, 05:30 pm - 07:00 pm Fri
190	AMSOM	MKT623 Marketing the Intangible [Second Quarter]	1.5	OR MKT103 Marketing Management	1	Bijal Mehta	09:30 am - 11:00 am Mon, Wed
191	AMSOM	MKT625 Business of Sports - Marketing and Consumer Behaviour Perspective	3	OR MKT501 Marketing Management	1	Mahendra Singh Rao	07:00 pm - 08:30 pm Tue, Thu
192	AMSOM	MKT631 Sales and Distribution Management	3	,MKT102 Marketing Management - II OR MKT103 Marketing Management	1	Kavita Saxena	11:00 am - 12:30 pm Tue, Thu
193	AMSOM	MKT642 Interdisciplinary Approach To Consumer Understanding	3	None	1	Ravi Miglani	08:00 am - 09:30 am Mon, Wed
194	AMSOM	MKT642 Interdisciplinary Approach To Consumer Understanding	3	None	2	Ravi Miglani	08:00 am - 09:30 am Tue, Thu
195	AMSOM	MKT642 Interdisciplinary Approach To Consumer Understanding	3	None	3	Ravi Miglani	05:30 pm - 07:00 pm Tue, Thu
196	AMSOM	MKT653 Digital Marketing	3		1	Bijal Mehta	02:30 pm - 04:00 pm Tue, Thu
197	AMSOM	MKT654 Strategic Brand Management	3	MKT101 Marketing Management - I, OR MKT103 Marketing Management	1	Kavita Saxena	01:00 pm - 02:30 pm Tue, Thu
198	AMSOM	MKT661 Luxury Marketing	3		1	Atul Kumar	04:00 pm - 05:30 pm Tue, Thu
199	AMSOM	MKT661 Luxury Marketing	3		2	Atul Kumar	05:30 pm - 07:00 pm Tue, Thu

200	AMSOM	MKT662 Marketing Strategy using MARKSTRAT simulations [Second Quarter]	1.5		1	Atul Kumar	04:00 pm - 05:30 pm Sat, 05:30 pm - 07:00 pm Sat
201	AMSOM	MKT702 Academic Research in Consumer Psychology and Behaviour	3		1	Atul Kumar	02:30 pm - 04:00 pm Fri, 01:00 pm - 02:30 pm Fri, Mon
202	AMSOM	TOD205 Database Management for Managers	3		1	Vinay Vachharajani	04:00 pm - 05:30 pm Tue, Thu
203	AMSOM	TOD212 Decision Sciences	3		1	Bhaktida Trivedi	11:00 am - 12:30 pm Wed, Fri
204	AMSOM	TOD212 Decision Sciences	3		2	Bhaktida Trivedi	08:00 am - 09:30 am Tue, Thu
205	AMSOM	TOD212 Decision Sciences	3		3	Loyimee Gogoi	01:00 pm - 02:30 pm Mon, Wed
206	AMSOM	TOD221 Operations Management	3	EPP100 Microeconomics, OR	1	Ab Raju	08:00 am - 09:30 am Tue, Thu
207	AMSOM	TOD221 Operations Management	3	EPP100 Microeconomics, OR	2	Ab Raju	05:30 pm - 07:00 pm Tue, Thu
208	AMSOM	TOD221 Operations Management	3	EPP100 Microeconomics, OR	3	Ab Raju	02:30 pm - 04:00 pm Mon, Fri
209	AMSOM	TOD310 Predictive Analytics for Business	3	,STA100 Probability,,MAT202 Probability and Random Processes OR MAT 2XX Probability and Stochastic Process	1	Amit Singh	05:30 pm - 07:00 pm Mon, Fri
210	AMSOM	TOD322 Supply Chain Management	3		1	Sanjoy Mukerji	09:30 am - 11:00 am Tue, Thu
211	AMSOM	TOD324 Service Operations Management	3		1	Sanjoy Mukerji	01:00 pm - 02:30 pm Tue, Thu
212	AMSOM	TOD326 Project Management	3		1	Padmin Buch	09:30 am - 11:00 am Tue, Thu
213	AMSOM	TOD326 Project Management	3		2	Jinraj Joshipura	09:30 am - 11:00 am Mon, Fri
214	AMSOM	TOD331 Supply Chain Analytics	3		1	Aneesh Chinubhai	01:00 pm - 02:30 pm Sat, 02:30 pm - 04:00 pm Sat
215	AMSOM	TOD501 Descriptive and Inferential Statistics	1.5		2	Amit Das	02:30 pm - 04:00 pm Mon, Fri
216	AMSOM	TOD501 Descriptive and Inferential Statistics [First Quarter]	1.5		1	Bhargav Adhvaryu	02:30 pm - 04:00 pm Tue, Thu

217	AMSOM	TOD504 Mathematical Methods for Economics	3		1	Abhinandan Sinha	02:30 pm - 04:00 pm Mon, Fri
218	AMSOM	TOD522 Supply Chain Management [First Quarter]	1.5	TODS211 Quantitative Methods for Business,, OR MAT211 Mathematics II,TODS208 Calculus for Business	1	Sanjoy Mukerji	08:00 am - 09:30 am Tue, Thu
219	AMSOM	TOD524 Operations Management	2	None	1	Sanjoy Mukerji	08:00 am - 09:30 am Wed, Fri
220	AMSOM	TOD524 Operations Management	2	None	2	Sanjoy Mukerji	05:30 pm - 07:00 pm Tue, Thu
221	AMSOM	TOD526 Project Management	2		1	Padmin Buch	08:00 am - 09:30 am Tue, Thu
222	AMSOM	TOD531 Analytics Lab	1		1	Jigar Shah	04:00 pm - 05:30 pm Mon
223	AMSOM	TOD531 Analytics Lab	1		2	Jigar Shah	05:30 pm - 07:00 pm Mon
224	AMSOM	TOD533 Introduction to AI: A Management Perspective	3		1	Amit Das Amit Singh	09:30 am - 11:00 am Fri, 01:00 pm - 02:30 pm Fri
225	AMSOM	TOD601 ANOVA and Regression [Second Quarter]	1.5		1	Bhargav Adhvaryu	02:30 pm - 04:00 pm Tue, Thu
226	AMSOM	TOD701 Game Theory with Applications	3		1	Abhinandan Sinha	04:00 pm - 05:30 pm Tue, Thu
227	SAS	BIO 107 Concepts of Biology	3		1	Abdulkhalik Md. Yaminbhai Mansuri	08:00 am - 09:30 am Mon, Wed
228	SAS	BIO 107 Concepts of Biology	3		2	Pooja Shah	08:00 am - 09:30 am Tue, Thu
229	SAS	BIO 107 Concepts of Biology	3		3	Abdulkhalik Md. Yaminbhai Mansuri	08:00 am - 09:30 am Fri, 09:30 am - 11:00 am Fri
230	SAS	BIO 791 Research Rotation II	4		1	To Be Announced	08:00 am - 09:30 am Sun
231	SAS	BIO101 Introductory Biology [Bi-Semester]	3		1	Pooja Shah	09:30 am - 11:00 am Mon, Fri
232	SAS	BIO106 Introductory Biology practical [Second Quarter]	1.5	None	1	Devanshi Dalal	01:00 pm - 02:30 pm Mon, Fri, 02:30 pm - 04:00 pm Mon, Fri
233	SAS	BIO106 Introductory Biology practical [Second Quarter]	1.5	None	2	Devanshi Dalal	01:00 pm - 02:30 pm Tue, Thu, 02:30 pm - 04:00 pm Tue, Thu

234	SAS	BIO114 Microscopy and Imaging	3	BIO101 Introductory Biology, OR	1	Ritesh Shukla	11:00 am - 12:30 pm Tue, Thu
235	SAS	BIO200 Human Physiology	3		1	Souvik Sen Gupta	09:30 am - 11:00 am Mon, Wed
236	SAS	BIO203 Biochemistry and Genetics Practicals	3	None	1	Prachi Dave Brinda Panchal	09:30 am - 11:00 am Mon, Wed, 11:00 am - 12:30 pm Mon, Wed
237	SAS	BIO203 Biochemistry and Genetics Practicals	3	None	2	Prachi Dave Brinda Panchal	09:30 am - 11:00 am Tue, Thu, 11:00 am - 12:30 pm Tue, Thu
238	SAS	BIO205 Molecular biology and Bioinformatics practical	3	None	1	Devanshi Dalal Vidhi Shukla	02:30 pm - 04:00 pm Mon, Fri, 04:00 pm - 05:30 pm Mon, Fri
239	SAS	BIO205 Molecular biology and Bioinformatics practical	3	None	2	Devanshi Dalal Vidhi Shukla	09:30 am - 11:00 am Wed, Fri, 11:00 am - 12:30 pm Wed, Fri
240	SAS	BIO206 Physiology Laboratory Course	1.5		1	Souvik Sen Gupta	09:30 am - 11:00 am Tue, 11:00 am - 12:30 pm Tue
241	SAS	BIO206 Physiology Laboratory Course	1.5		2	Souvik Sen Gupta	09:30 am - 11:00 am Fri, 11:00 am - 12:30 pm Fri
242	SAS	BIO209 Basic Biochemistry	3		1	Ashim Rai	02:30 pm - 04:00 pm Mon, Fri
243	SAS	BIO211 Molecular Biology	3		1	Souvik Sen Gupta Ashutosh Kumar	02:30 pm - 04:00 pm Tue, Thu
244	SAS	BIO213 Basics of Bioinformatics	3	OR CSD102 Advanced Level Data Science	1	Krishna Bs Swamy	01:00 pm - 02:30 pm Mon, Fri
245	SAS	BIO260 Introduction to Plant Biology [Bi-Semester]	3		1	Bhuvan Pathak	11:00 am - 12:30 pm Tue, Thu
246	SAS	BIO310 Genetics	3		1	Krishna Bs Swamy	01:00 pm - 02:30 pm Tue, Thu
247	SAS	BIO319 Physiology of excitable cells	3	BIO101 Introductory Biology,BIO203 Molecular Biology, OR	1	Rama Ratnam	09:30 am - 11:00 am Tue, Thu
248	SAS	BIO390 Signal measurement and analysis for neuroscientists	3		1	Rama Ratnam	05:30 pm - 07:00 pm Tue, Thu, 07:00 pm - 08:30 pm Thu
249	SAS	BIO500 Recombinant DNA Technology	3	BIO203 Molecular Biology	1	Ashutosh Kumar	01:00 pm - 02:30 pm Tue, Thu
250	SAS	BIO544 Cancer Biology	3	BIO205 Cell Biology,BCS201	1	Vivek Tanavde	01:00 pm - 02:30 pm Mon, Wed

				Biochemistry II,BIO203 Molecular Biology			
251	SAS	BIO544 Cancer Biology	3	BIO205 Cell Biology,BCS201 Biochemistry II,BIO203 Molecular Biology	2	Vivek Tanavde	08:00 am - 09:30 am Sun
252	SAS	BIO552 Computational Structural Biology	3	BCS102 Biochemistry I,, OR BIO101 Introductory Biology,BIO209 Introductory Biochemistry	1	Balaji Prakash	11:00 am - 12:30 pm Tue, Thu
253	SAS	BIO553 Animal Behaviour	3		1	Ratna Ghosal	04:00 pm - 05:30 pm Tue, Thu
254	SAS	BIO554 Forensic Biotechnology	3		1	Ritesh Shukla	11:00 am - 12:30 pm Mon, Wed
255	SAS	BIO575 Special topics in the Life Sciences: Scientific texts in context--The DNA Papers	3		1	Neeraja Sankaran	04:00 pm - 05:30 pm Mon, Fri
256	SAS	BIO598 Master's Thesis II	6		1	Shomen Mukherjee	08:00 am - 09:30 am Sun
257	SAS	BIO600 Evolutionary Biology	3		1	Subhash Rajpurohit	02:30 pm - 04:00 pm Tue, Thu
258	SAS	BIO775 Special topics in the Life Sciences: Scientific texts in context--The DNA Papers	4		1	Neeraja Sankaran	04:00 pm - 05:30 pm Mon, Fri
259	SAS	BIO790 Rotation in Lab	4	None	1	To Be Announced	04:00 pm - 05:00 pm Sun
260	SAS	BLS898 Research Proposal Preparation	0		1	Ratna Ghosal	08:00 am - 09:30 am Sun
261	SAS	BLS898 Research Proposal Preparation	0		2	Ashim Rai	08:00 am - 09:30 am Sun
262	SAS	BLS898 Research Proposal Preparation	0		3	Vivek Tanavde	09:30 am - 11:00 am Sun
263	SAS	BLS898 Research Proposal Preparation	0		4	Ashim Rai Krishna Bs Swamy	11:00 am - 12:30 pm Sun
264	SAS	BLS899 Thesis Work	0		1	Noopur Thakur	08:00 am - 09:30 am Sun
265	SAS	BLS899 Thesis Work	0		2	Ashutosh Kumar	08:00 am - 09:30 am Sun

266	SAS	BLS899 Thesis Work	0		3	Ratna Ghosal	09:30 am - 11:00 am Sun
267	SAS	BLS899 Thesis Work	0		4	Souvik Sen Gupta	08:00 am - 09:30 am Sun
268	SAS	BLS899 Thesis Work	0		5	Vivek Tanavde	08:00 am - 09:30 am Sun
269	SAS	BLS899 Thesis Work	0		6	Subhash Rajpurohit	08:00 am - 09:30 am Sun
270	SAS	BLS899 Thesis Work	0		7	Ritesh Shukla	08:00 am - 09:30 am Sun
271	SAS	BLS899 Thesis Work	0		8	Krishna Bs Swamy	09:30 am - 11:00 am Sun
272	SAS	CSC 210 Introductions to Data Structures and Algorithms	3		1	Alok Shukla	11:00 am - 12:30 pm Mon, Wed
273	SAS	CWE500 Creative Writing: Fiction and Non-fiction	3		1	Tejaswini Niranjana	04:00 pm - 05:30 pm Wed, 05:30 pm - 07:00 pm Wed
274	SAS	FRE111 Conversational French - I	3		1	Tahereh Rahimdel	08:00 am - 09:30 am Mon, Wed, Fri
275	SAS	FRE111 Conversational French - I	3		2	Tahereh Rahimdel	09:30 am - 11:00 am Mon, Wed, Fri
276	SAS	GER 111 Conversational German I	3		1	Akshay Chudasama	07:00 pm - 08:30 pm Tue, Thu, Fri
277	SAS	HST 201 Trade and Religion in the Indian Ocean World	3	None	1	Murari Jha	02:30 pm - 04:00 pm Mon, Fri
278	SAS	HST 290 Public Culture in Modern India	3		1	Rahul Sarwate	11:00 am - 12:30 pm Mon, Fri
279	SAS	HST101 Ahmedabad as a Gateway to the World	3		1	Sahil Kureshi	02:30 pm - 04:00 pm Tue, Thu
280	SAS	HST101 Ahmedabad as a Gateway to the World [Bi-Semester]	3		2	Darshini Mahadevia Aparajith Ramnath	09:30 am - 11:00 am Mon, Wed
281	SAS	HST102 The Birth and Development of Civilisations in the Indian Subcontinent	3		1	Manomohini Dutta	04:00 pm - 05:30 pm Tue, Thu
282	SAS	HST105 Introduction to the history of biology and medicine [Bi-Semester]	4		1	Neeraja Sankaran	11:00 am - 12:30 pm Mon, Wed, Fri

283	SAS	HST175 Sources of Indian Culture [Bi-Semester]	3		1	Aditya Chaturvedi	01:00 pm - 02:30 pm Tue, Thu
284	SAS	HST220 Science, Technology, and the Making of the Modern World	3		1	Aparajith Ramnath	01:00 pm - 02:30 pm Mon, Wed
285	SAS	HST260 Methods in Intellectual History	3		1	Rahul Sarwate	11:00 am - 12:30 pm Tue, Thu
286	SAS	IHS801 South Asian Islams (Individual Study Course)	3		1	Safwan Amir	08:00 am - 09:30 am Sun
287	SAS	JAP111 Conversational Japanese - I	3	OR None	1	Akshay Chudasama	05:30 pm - 07:00 pm Tue, Thu, Fri
288	SAS	LIT105 Urdu Prose and Poetry	3	None	1	Salmabanu Shaikh	04:00 pm - 05:30 pm Mon, Fri
289	SAS	LIT120 Introduction to Hindi Literature	3		1	Charu Singh	02:30 pm - 04:00 pm Tue, Thu
290	SAS	LIT223 Hindi Short Story	3		1	Charu Singh	02:30 pm - 04:00 pm Mon, Fri
291	SAS	LIT502 Mapping the Worlds of Literature	3		1	Tejaswini Niranjana	09:45 am - 12:30 pm Sat
292	SAS	MAT 334 Introductory Real Analysis	3	MAT142 Introductory Calculus, OR	1	Pravakar Paul	01:00 pm - 02:30 pm Mon, Wed
293	SAS	MAT123 Precalculus [Bi-Semester]	3		1	Alok Shukla	09:30 am - 11:00 am Mon, Fri
294	SAS	MAT123 Precalculus [Bi-Semester]	3		2	Kanak Dhotre	01:00 pm - 02:30 pm Mon, Fri
295	SAS	MAT123 Precalculus [Bi-Semester]	3		3	Mohit Rohida	02:30 pm - 04:00 pm Tue, Thu
296	SAS	MAT123 Precalculus [Bi-Semester]	3		4	Jitesh Jhawar	11:00 am - 12:30 pm Tue, Thu
297	SAS	MAT123 Precalculus [Bi-Semester]	3		5	Jay Verma	01:00 pm - 02:30 pm Wed, Fri
298	SAS	MAT123 Precalculus [Bi-Semester]	3		6	Kishan Malaviya	09:30 am - 11:00 am Tue, Thu
299	SAS	MAT123 Precalculus [Bi-Semester]	3		7	Parth Varasani	08:00 am - 09:30 am Tue, Thu
300	SAS	MAT142 Introductory Calculus	3		1	Dinesh Barot	09:30 am - 11:00 am Mon, Fri
301	SAS	MAT142 Introductory Calculus	3		2	Bhaktida Trivedi	11:00 am - 12:30 pm Tue, Thu

302	SAS	MAT142 Introductory Calculus	3		3	Dinesh Barot	01:00 pm - 02:30 pm Mon, Wed
303	SAS	MAT142 Introductory Calculus	3		4	Bhaktida Trivedi	08:00 am - 09:30 am Mon, Wed
304	SAS	MAT142 Introductory Calculus	3		5	Ashwin Pande	05:30 pm - 07:00 pm Sat
305	SAS	MAT142 Introductory Calculus [Bi-Semester]	3		6	Loyimee Gogoi	09:30 am - 11:00 am Mon, Wed
306	SAS	MAT146 Intermediate Calculus [Bi-Semester]	3		1	Ashwin Pande	02:30 pm - 04:00 pm Tue, Thu
307	SAS	MAT165 Gateway to Abstract Reasoning [Bi-Semester]	3		1	Pravakar Paul	11:00 am - 12:30 pm Wed, Fri
308	SAS	MAT256 Differential Equations	3		1	Manjil Saikia	04:00 pm - 05:30 pm Mon, Fri
309	SAS	MAT281 Multivariable Calculus	3		1	Pravakar Paul	09:30 am - 11:00 am Mon, Wed
310	SAS	MAT281 Multivariable Calculus [Bi-Semester]	4		1	Eshita Mazumdar	02:30 pm - 04:00 pm Tue, Thu, 01:00 pm - 02:30 pm Tue
311	SAS	MAT315 Combinatorial Enumeration	3	OR MAT142 Introductory Calculus	1	Manjil Saikia	02:30 pm - 04:00 pm Tue, Thu
312	SAS	MAT515 Combinatorial Enumeration	3		1	Manjil Saikia	02:30 pm - 04:00 pm Tue, Thu
313	SAS	MAT711 Advanced Algebra I	3		1	Eshita Mazumdar	11:00 am - 12:30 pm Mon, Wed
314	SAS	MAT721 Advanced Analysis-I	3		1	Ashwin Pande	08:00 am - 09:30 am Sun
315	SAS	MUS101 Inside Indian Music	3		1	Prachi Vaidya	04:00 pm - 05:30 pm Mon, Fri
316	SAS	MUS101 Inside Indian Music	3		2	Prachi Vaidya	05:30 pm - 07:00 pm Mon, Fri
317	SAS	MUS103 Culturing the Voice	3		1	Prachi Vaidya	04:00 pm - 05:30 pm Tue, Thu
318	SAS	MUS103 Culturing the Voice	3		2	Prachi Vaidya	05:30 pm - 07:00 pm Tue, Thu
319	SAS	MUS104 Fundamentals of Music and Sound [Bi-Semester]	3		1	Lakshmi Sreeram	11:00 am - 12:30 pm Tue, Thu
320	SAS	PER101 Introduction to Persian I	3	None OR None	1	Salmabanu Shaikh	04:00 pm - 05:30 pm Tue, Thu
321	SAS	PER201 Intermediate Scholastic Persian - I	3		1	Salmabanu Shaikh	02:30 pm - 04:00 pm Mon, Fri

322	SAS	PHI115 Philosophy as a Way of Life: Readings from Western Philosophy [Bi-Semester]	3	None OR None	1	Apaar Kumar	09:30 am - 11:00 am Tue, Thu
323	SAS	PHI200 History of Modern Western Philosophy: Metaphysics and Epistemology	3		1	Apaar Kumar	09:30 am - 11:00 am Mon, Wed
324	SAS	PHI235 Philosophy of Psychology	3		1	Nagireddy Neelakanteswar Reddy	05:30 pm - 07:00 pm Mon, Fri
325	SAS	PHI415 Śabda, Artha, Rasa: Contours of Indian Philosophy of Language	3		1	Shishir Saxena	02:30 pm - 04:00 pm Tue, Thu
326	SAS	PHL210 History of Vedanta	3		1	Aditya Chaturvedi	08:00 am - 09:30 am Tue, Thu
327	SAS	PHL320 Ideas of India: Gandhi, Savarkar and Ambedkar	3		1	Rahul Sarwate	02:30 pm - 04:00 pm Tue, Thu
328	SAS	PHY105 Invitation to Physics [Second Quarter]	1.5		1	Gaurav Goswami	09:30 am - 11:00 am Mon, Wed
329	SAS	PHY112 Electromagnetic Theory	3		1	Raghwinder Singh	08:00 am - 09:30 am Tue, Thu
330	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
331	SAS	PHY310 Quantum Mechanics I	3	MAT 246 Linear Algebra,MAT 256 Differential Equations,PHY212 Oscillations, Waves, and Optics, OR	1	Gaurav Goswami	04:00 pm - 05:30 pm Tue, 01:00 pm - 02:30 pm Fri, 11:00 am - 12:30 pm Wed
332	SAS	PHY313 Thermodynamics	3	MAT103 Calculus	1	Sutapa Mukherji	01:00 pm - 02:30 pm Tue, Thu, Wed
333	SAS	PHY314 Electrical Circuits and Electronics	3		1	Aditya Vaishya	11:00 am - 12:30 pm Tue, Thu
334	SAS	PHY321 Laboratory Physics - Electronics	1.5	OR PHY122 Laboratory Physics: Electromagnetism	1	Aditya Vaishya	02:30 pm - 04:00 pm Thu, 04:00 pm - 05:30 pm Thu

335	SAS	PHY430 Introductory Astrophysics	3	PHY111 Classical Mechanics - I,PHY112 Electromagnetic Theory,PHY212 Oscillations, Waves, and Optics,,ENR210 Continuum Mechanics,	1	Samyaday Choudhury	05:30 pm - 07:00 pm Thu, Tue
336	SAS	PHY435 Introduction to Plasma Physics	3		1	Soumen Ghosh	02:30 pm - 04:00 pm Mon, Fri
337	SAS	PHY635 Introduction to Plasma Physics	3		1	Soumen Ghosh	02:30 pm - 04:00 pm Mon, Fri
338	SAS	PHY701 Mathematical Methods for Physics	3		1	Raghavan Rangarajan	04:00 pm - 05:30 pm Mon, 11:00 am - 12:30 pm Wed
339	SAS	PHY732 Atmospheric Aerosols	3		1	Aditya Vaishya	07:00 pm - 08:30 pm Mon, Fri
340	SAS	PHY733 Laser Matter Interaction	3		1	Raghwinder Singh	06:00 pm - 07:00 pm Sun
341	SAS	PHY797 Research Project - I	3		1	Soumen Ghosh	02:00 pm - 03:00 pm Sun
342	SAS	PHY798 Research Project - II	3		1	Raghwinder Singh	07:00 pm - 08:00 pm Sun
343	SAS	PHY798 Research Project - II	3		2	Gaurav Goswami	11:00 am - 12:00 pm Sun
344	SAS	PHY798 Research Project - II	3		3	Pankaj Joshi	07:00 am - 08:00 am Sun
345	SAS	PHY798 Research Project - II	3		4	Aditya Vaishya	11:00 am - 12:30 pm Sun
346	SAS	PSY 401 Psychological Assessment and Testing	3	PSY 235 Psychophysics lab, OR	1	Aarzoo Gupta	01:00 pm - 02:30 pm Tue, Thu
347	SAS	PSY101 Introduction to Psychology	3		1	Divita Singh	05:30 pm - 07:00 pm Tue, Thu
348	SAS	PSY101 Introduction to Psychology [Bi-Semester]	3		2	Nagireddy Neelakanteswar Reddy	01:00 pm - 02:30 pm Wed, Fri
349	SAS	PSY161 Personality and Individual Differences [Bi-Semester]	3		1	Rachna Mishra	02:30 pm - 04:00 pm Mon, Fri
350	SAS	PSY210 Cognitive Psychology	3		1	Divita Singh	01:00 pm - 02:30 pm Tue, Thu
351	SAS	PSY210 Cognitive Psychology [Bi-Semester]	3		2	Divita Singh	01:00 pm - 02:30 pm Wed

352	SAS	PSY215 Developmental Psychology	3		1	Aarzoo Gupta	04:00 pm - 05:30 pm Mon, Fri
353	SAS	PSY280 Abnormal Psychology	3		1	Rucha Sarwate	05:30 pm - 07:00 pm Mon, Fri
354	SAS	PSY310 Lab in Psychology	3	OR RES101 Introduction to Research Methodology	1	Nithin George	11:00 am - 12:30 pm Mon, Fri
355	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
356	SAS	PSY405 Drivers of Psychological Science	3		1	Nagireddy Neelakanteswar Reddy	05:30 pm - 07:00 pm Tue, Thu
357	SAS	PSY499 Undergraduate Thesis	6		1	Mona Mehta	08:00 am - 09:30 am Sun
358	SAS	PSY705 History and Systems of Psychology	3		1	Nagireddy Neelakanteswar Reddy	02:00 pm - 03:00 pm Sun
359	SAS	PSY710 Advances in Cognitive Psychology	3		1	Nithin George	08:00 am - 09:30 am Sat
360	SAS	PSY796 Perception in Autism Spectrum Disorder (Individual Study Course)	3		1	Nithin George	08:00 am - 09:30 am Sun
361	SAS	PVA 171 Theatre and Society	3	None OR None	1	Kabir Thakore	04:00 pm - 05:30 pm Fri, 05:30 pm - 07:00 pm Fri
362	SAS	PVA 171 Theatre and Society	3	None OR None	2	Kabir Thakore	04:00 pm - 05:30 pm Tue, 05:30 pm - 07:00 pm Tue
363	SAS	PVA100 Fundamentals of Theatre and Theatricality [Bi-Semester]	3		1	Deepan Sivaraman	02:30 pm - 04:00 pm Tue, 04:00 pm - 05:30 pm Tue
364	SAS	PVA102 Exploring the Black Box [Bi-Semester]	3		1	Kathyayini Dash	05:30 pm - 07:00 pm Fri, 04:00 pm - 05:30 pm Fri
365	SAS	PVA112 Fundamentals of Drawing	3		1	Rajesh Naidu	11:00 am - 12:30 pm Mon, Wed

366	SAS	PVA123 Fundamentals of Painting	3	OR None	1	Rajesh Naidu	11:00 am - 12:30 pm Tue, Thu
367	SAS	PVA126 Scenic Design for Theatre	3		1	Dushyant Malik	09:30 am - 11:00 am Wed, Fri
368	SAS	PVA126 Scenic Design for Theatre	3		2	Dushyant Malik	11:00 am - 12:30 pm Wed, Fri
369	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
370	SAS	PVA127 Street Theatre: Raise the Voice	3		2	Savan Zalariya	04:00 pm - 05:30 pm Fri, 05:30 pm - 07:00 pm Fri
371	SAS	PVA130 Fundamentals of Photography	3		1	Sharan Goel	11:00 am - 12:30 pm Mon, Fri
372	SAS	PVA130 Fundamentals of Photography	3		2	Sharan Goel	11:00 am - 12:30 pm Tue, Thu
373	SAS	PVA181 Music and Society	3		1	Aditi Deo	04:00 pm - 05:30 pm Mon, Fri
374	SAS	RES101 Introduction to Research Methodology	3		1	Nithin George Maryann Chacko	04:00 pm - 05:30 pm Tue, Thu
375	SAS	SAN101 Learning Sanskrit Through Sanskrit Literature: Elementary	3		1	Shishir Saxena	02:30 pm - 04:00 pm Mon, Fri
376	SAS	SAN201 Reading Sanskrit Scholastic Texts: Elementary	3		1	Aditya Chaturvedi	08:00 am - 09:30 am Mon, Wed
377	SAS	SPS102 Identity, Inequality and Difference [Bi-Semester]	4		1	Leya Mathew	11:00 am - 12:30 pm Tue, Thu, 08:00 am - 09:30 am Fri
378	SAS	SPS103 Politics in Independent India [Bi-Semester]	3		1	Sarthak Bagchi	01:00 pm - 02:30 pm Wed, Fri
379	SAS	SPS202 Family, Community, Nation	3		1	Maryann Chacko	01:00 pm - 02:30 pm Tue, Thu
380	SAS	SPS250 International Relations Theory [Bi-Semester]	3		1	Kasturi Chatterjee	01:00 pm - 02:30 pm Tue, Thu
381	SAS	SPS261 Government Secrecy and intelligence Studies	3		1	Keita Omi	04:00 pm - 05:30 pm Tue, Thu
382	SAS	SPS264 Development and its Discontents	3	OR None	1	Suchismita Das	02:30 pm - 04:00 pm Mon, Fri

383	SAS	SPS265 Comparative Political Behaviour: Voters and Political Parties in India and the World	3		1	Neelanjan Sircar	01:00 pm - 02:30 pm Mon, Wed
384	SAS	SPS300 Qualitative Research Methods	3	OR RME101 Introduction to Research Methodology	1	Maya Ratnam	11:00 am - 12:30 pm Tue, Thu
385	SAS	SPS303 Locating Globalisation	3		1	Maya Ratnam	04:00 pm - 05:30 pm Tue, Thu
386	SAS	SPS350 SELF AND SOCIETY IN THE STUDY OF RELIGION	3		1	Safwan Amir	02:30 pm - 04:00 pm Tue, Thu
387	SAS	SPS400 Thesis/Capstone Project Proposal Course	3		1	Leya Mathew	11:00 am - 12:30 pm Mon, Wed
388	SAS	SPS700 Research Methods in the Social Sciences	3		1	Maya Ratnam	11:00 am - 12:30 pm Tue, Thu
389	SAS	STA100 Probability	3	OR MAT100 Calculus and Differential Equations	1	Vinay Vachharajani	11:00 am - 12:30 pm Mon, Fri
390	SAS	STA100 Probability	3	OR MAT100 Calculus and Differential Equations	2	Dinesh Barot	09:30 am - 11:00 am Tue, Thu
391	SAS	STA100 Probability	3	OR MAT100 Calculus and Differential Equations	3	Loyimee Gogoi	11:00 am - 12:30 pm Tue, Thu
392	SAS	STA100 Probability	3	OR MAT100 Calculus and Differential Equations	4	Virali Vora	04:00 pm - 05:30 pm Mon, Fri
393	SAS	STA101 Introductory Statistics	3	OR CSD101 Intermediate Level Data Science	1	Anuja Gupta	08:00 am - 09:30 am Tue, Thu
394	SAS	STA101 Introductory Statistics	3	OR CSD101 Intermediate Level Data Science	2	Shahrukh Anjum	08:00 am - 09:30 am Mon, Wed
395	SAS	STA101 Introductory Statistics	3	OR CSD101 Intermediate Level Data Science	3	Virali Vora	04:00 pm - 05:30 pm Tue, Thu
396	SAS	STA101 Introductory Statistics	3	OR CSD101 Intermediate Level Data Science	4	Vinay Vachharajani	04:00 pm - 05:30 pm Mon, Fri
397	SAS	STA101 Introductory Statistics	3	OR CSD101 Intermediate Level Data Science	5	Shahrukh Anjum	11:00 am - 12:30 pm Wed, Fri
398	SAS	STA101 Introductory Statistics	3	OR CSD101 Intermediate Level Data Science	6	Virali Vora	05:30 pm - 07:00 pm Tue, Thu
399	SEAS	CDC501 CDC Learning And Development	0		2	To Be Announced	02:30 pm - 04:00 pm Thu
400	SEAS	CDC503 CDC LEARNING AND DEVELOPMENT	0		1	To Be Announced	02:30 pm - 04:00 pm Fri

401	SEAS	CHE100 The World of Chemical and Environmental Engineering	1.5		1	Snigdha Khuntia	02:30 pm - 04:00 pm Fri, 04:00 pm - 05:30 pm Fri
402	SEAS	CHE101 Physical Chemistry	1.5		1	Aditi Singhal	01:00 pm - 02:30 pm Wed, Fri
403	SEAS	CHE101 Physical Chemistry	1.5		2	Aditya Prakash Kanth	01:00 pm - 02:30 pm Mon, Fri
404	SEAS	CHE205 Chemical Technology and Calculations	3	CHE220 Thermodynamics - I,	1	Snigdha Khuntia	11:00 am - 12:00 pm Fri, 12:00 pm - 01:00 pm Fri, 03:00 pm - 04:00 pm Mon, 04:00 pm - 05:00 pm Mon
405	SEAS	CHE211 Material and Energy Balance	3	None OR None	1	Snigdha Khuntia	11:00 am - 12:00 pm Fri, 12:00 pm - 01:00 pm Fri, 04:00 pm - 05:00 pm Mon
406	SEAS	CHE300 Mass Transfer Operations - II	3	CHE204 Mass Transfer Operations - I,CHE221 Thermodynamics - II,	1	Sridhar Dalai	01:00 pm - 02:30 pm Tue, Thu
407	SEAS	CHE303 Transport Phenomena	3	CHE201 Fluid Mechanics,CHE204 Mass Transfer Operations - I,CHE300 Mass Transfer Operations - II, OR	1	Arijit Ganguli	04:00 pm - 05:00 pm Thu, 05:00 pm - 06:00 pm Thu, 06:00 pm - 07:00 pm Thu
408	SEAS	CHE309 Computational Fluid Dynamics	3	CHE201 Fluid Mechanics,CHE203 Heat Transfer	1	Arijit Ganguli	02:00 pm - 03:00 pm Sat, 03:00 pm - 04:00 pm Sat, 04:00 pm - 05:00 pm Sat
409	SEAS	CHE311 Chemical Reaction Engineering-I	2		1	Deepak Kunzru	10:00 am - 11:00 am Mon, Fri
410	SEAS	CHE312 Experiments in Fluid Flow and Heat Transfer	1.5	CHE201 Fluid Mechanics, OR	1	Arijit Ganguli Deepshikha Singh	02:30 pm - 04:00 pm Mon, 04:00 pm - 05:30 pm Mon
411	SEAS	CHE402 Chemical Process Simulation	2		1	Dharamashi Rabari Sridhar Dalai	01:00 pm - 02:00 pm Mon, 02:00 pm - 03:00 pm Mon, 03:00 pm - 04:00 pm Mon
412	SEAS	CHE440 Process Design and Economics	2	CHE170 Introduction to Materials Science and Engineering,CHE201 Fluid Mechanics,CHE204 Mass	1	Arijit Ganguli	01:00 pm - 02:30 pm Tue, 02:30 pm - 04:00 pm Tue

				Transfer Operations - I,CHE211 Material and Energy Balance,CHE300 Mass Transfer Operations - II, OR			
413	SEAS	CHE503 Pollution Control	3		1	Ramya Srinivasan	09:30 am - 11:00 am Tue, Thu
414	SEAS	CHE504 Catalysis and Catalytic Processes	3		1	Aditi Singhal	09:30 am - 11:00 am Wed, 11:00 am - 12:30 pm Sat
415	SEAS	CHE507 Advanced Computational Fluid Dynamics	3		1	Arijit Ganguli	02:00 pm - 03:00 pm Sat, 03:00 pm - 04:00 pm Sat, 04:00 pm - 05:00 pm Sat
416	SEAS	CHE508 Advanced Transport Phenomena	3	CHE201 Fluid Mechanics,CHE204 Mass Transfer Operations - I,CHE300 Mass Transfer Operations - II, OR	1	Arijit Ganguli	02:00 pm - 03:00 pm Thu, 03:00 pm - 04:00 pm Thu, 04:00 pm - 05:00 pm Thu, 05:00 pm - 06:00 pm Thu, 06:00 pm - 07:00 pm Thu
417	SEAS	CHE574 Special Topic: Instrumental Methods of Analysis	3		1	Aditi Singhal	08:00 am - 09:30 am Mon
418	SEAS	CHY100 Chemistry	3	OR None	1	Aditi Singhal	09:30 am - 11:00 am Sat
419	SEAS	CHY101 Organic Chemistry	3		1	Aditi Singhal	11:00 am - 12:30 pm Sat
420	SEAS	CMP611 MATHEMATICS FOR COMPOSITES	2		1	Bimal Das	02:00 pm - 03:00 pm Tue, 01:00 pm - 02:00 pm Tue, 11:00 am - 12:00 pm Thu, Sat, 12:00 pm - 01:00 pm Thu, 10:00 am - 11:00 am Sat
421	SEAS	CMP612 MECHANICS OF COMPOSITES	3		1	Sham Gurav	10:00 am - 11:00 am Wed, 01:00 pm - 02:00 pm Wed, 02:00 pm - 03:00 pm Wed, 11:00 am - 12:00 pm Fri, 12:00 pm - 01:00 pm Fri, 03:00 pm - 04:00 pm Sat, 04:00 pm - 05:00 pm Sat, 09:00 am - 10:00 am Thu

422	SEAS	CMP613 BASICS OF COMPOSITES	3		1	Hemant Chouhan	09:00 am - 10:00 am Wed, Fri, 10:00 am - 11:00 am Thu, Fri, 02:00 pm - 03:00 pm Fri, Sat, 03:00 pm - 04:00 pm Fri, 01:00 pm - 02:00 pm Sat
423	SEAS	CSC201 Computer Organisation	3	OR ECE209 Digital Design	1	Susanta Tewari	01:00 pm - 02:30 pm Mon, Wed
424	SEAS	CSD101 Fundamentals of Data Science	3		1	Vinay Vachharajani Kuntalkumar Patel	08:00 am - 09:30 am Tue, Thu
425	SEAS	CSD101 Fundamentals of Data Science	3		2	Najma Barkat Mitaxi Mehta	08:00 am - 09:30 am Mon, Fri
426	SEAS	CSD101 Fundamentals of Data Science	3		3	Dhawani Shah Shefali Naik	11:00 am - 12:30 pm Sat, 01:00 pm - 02:30 pm Sat
427	SEAS	CSD101 Fundamentals of Data Science	3		4	Najma Barkat Dulari Bhatt	08:00 am - 09:30 am Tue, Thu
428	SEAS	CSD101 Fundamentals of Data Science	3		5	Najma Barkat Dulari Bhatt	08:00 am - 09:30 am Sat, 09:30 am - 11:00 am Sat
429	SEAS	CSD101 Fundamentals of Data Science	3		6	Dinesh Barot Dimple Rudakia	04:00 pm - 05:30 pm Mon, Fri
430	SEAS	CSD101 Fundamentals of Data Science	3		7	Jinal Parikh Dimple Rudakia	04:00 pm - 05:30 pm Tue, Thu
431	SEAS	CSD101 Fundamentals of Data Science	3		8	Vinay Vachharajani Kuntalkumar Patel	08:00 am - 09:30 am Mon, Fri
432	SEAS	CSD101 Fundamentals of Data Science	3		9	Jinal Parikh Kunjal Gajjar	04:00 pm - 05:30 pm Mon, Fri
433	SEAS	CSD101 Fundamentals of Data Science	3		10	Dinesh Barot Kunjal Gajjar	04:00 pm - 05:30 pm Tue, Thu
434	SEAS	CSD102 Data Science	3		1	Sonali Sahai Shefali Naik	08:00 am - 09:30 am Mon, Fri
435	SEAS	CSD102 Data Science	3		2	Anuja Gupta Shefali Naik	04:00 pm - 05:30 pm Tue, Thu

436	SEAS	CSD102 Data Science	3		3	Anuja Gupta Kuntalkumar Patel	05:30 pm - 07:00 pm Tue, Thu, 01:00 pm - 02:30 pm Tue, Thu
437	SEAS	CSD102 Data Science	3		4	Virali Vora Shefali Naik	01:00 pm - 02:30 pm Wed, Fri
438	SEAS	CSE100 Fundamentals of Computer Programming	3		1	Kuntalkumar Patel	02:30 pm - 04:00 pm Fri, 04:00 pm - 05:30 pm Fri, 05:30 pm - 07:00 pm Fri
439	SEAS	CSE100 Fundamentals of Computer Programming	3		2	Kuntalkumar Patel	08:00 am - 09:30 am Sat
440	SEAS	CSE103 The World of Computer Science and Engineering	2		1	Sanjay Chaudhary Jayendra Bhalodiya	02:00 pm - 03:00 pm Wed, 02:30 pm - 04:00 pm Wed, 08:00 am - 09:00 am Sat, 09:00 am - 10:00 am Sat
441	SEAS	CSE103 The World of Computer Science and Engineering	2		2	Sanjay Chaudhary Jayendra Bhalodiya	02:00 pm - 03:00 pm Wed, 02:30 pm - 04:00 pm Wed, 12:00 pm - 01:00 pm Sat, 01:00 pm - 02:00 pm Sat
442	SEAS	CSE103 The World of Computer Science and Engineering	2		3	Sanjay Chaudhary Kuntalkumar Patel	02:00 pm - 03:00 pm Wed, Fri, 02:30 pm - 04:00 pm Wed, 03:00 pm - 04:00 pm Sat, 04:00 pm - 05:00 pm Sat, 01:00 pm - 02:00 pm Fri
443	SEAS	CSE205 Data Structures	4	CSE100 Fundamentals of Computer Programming,CSE101 Object Oriented Programming Lab, OR	1	Amit Nanavati	10:00 am - 11:00 am Fri, 11:00 am - 12:00 pm Fri, 01:00 pm - 02:30 pm Mon, Wed
444	SEAS	CSE205 Data Structures	4	CSE100 Fundamentals of Computer Programming,CSE101 Object Oriented Programming Lab, OR	2	Amit Nanavati	03:00 pm - 04:00 pm Mon, 04:00 pm - 05:00 pm Mon, 05:30 pm - 07:00 pm Tue, Thu
445	SEAS	CSE205 Data Structures	4	CSE100 Fundamentals of Computer Programming,CSE101	3	Amit Nanavati	11:00 am - 12:30 pm Fri

				Object Oriented Programming Lab, OR			
446	SEAS	CSE213 Digital Logic with Hardware Description Language	4		1	Hitesh Shrimali	05:30 pm - 07:00 pm Mon, 01:00 pm - 02:00 pm Fri, 02:00 pm - 03:00 pm Fri, 04:00 pm - 05:30 pm Sat
447	SEAS	CSE213 Digital Logic with Hardware Description Language	4		2	Hitesh Shrimali	05:30 pm - 07:00 pm Mon, 01:00 pm - 02:00 pm Fri, 02:00 pm - 03:00 pm Fri, 04:00 pm - 05:30 pm Sat
448	SEAS	CSE300 Software Engineering	3		1	Shefali Naik	11:00 am - 12:30 pm Mon, Wed
449	SEAS	CSE332 Operating Systems	4	CSE100 Fundamentals of Computer Programming,CSE205 Data Structures,CSE2XX Computer Organization and Architecture	1	Mansukh Savaliya	09:30 am - 11:00 am Thu, Fri, 11:00 am - 12:00 pm Wed, 12:00 pm - 01:00 pm Wed
450	SEAS	CSE332 Operating Systems	4	CSE100 Fundamentals of Computer Programming,CSE205 Data Structures,CSE2XX Computer Organization and Architecture	2	Mansukh Savaliya	04:00 pm - 05:30 pm Thu, 11:00 am - 12:00 pm Wed, 12:00 pm - 01:00 pm Wed, 01:00 pm - 02:30 pm Fri
451	SEAS	CSE340 Operating Systems	3	None,CSC100 Introduction to Computer Programming	1	Susanta Tewari	11:00 am - 12:30 pm Tue, Thu
452	SEAS	CSE500 Statistical Learning	3		1	Siddhartha Asthana	10:00 am - 11:00 am Sat, 11:00 am - 12:00 pm Sat, 12:00 pm - 01:00 pm Sat
453	SEAS	CSE516 Probabilistic Graphical Models	3	None OR None	1	Dhaval Patel	09:30 am - 11:00 am Fri, 11:00 am - 12:30 pm Fri
454	SEAS	CSE518 Artificial Intelligence	3	CSC104 Introduction to Computation and Programming,CSC210 Data Structures and Algorithms,MAT101 Discrete Mathematics, OR	1	Shashi Prabh	01:00 pm - 02:30 pm Mon, Wed

455	SEAS	CSE521 Big Data Analytics	3	CSC520 Data Analytics and Visualisation, OR	1	Rupsa Bhowmick	04:00 pm - 05:30 pm Tue, Thu
456	SEAS	CSE525 Theory of Computing	3	CSC210 Data Structures and Algorithms,CSC310 Advanced Data Structures and Algorithms, OR	1	Souvik Roy	01:00 pm - 02:30 pm Tue, Thu
457	SEAS	CSE525 Theory of Computing	3	CSC210 Data Structures and Algorithms,CSC310 Advanced Data Structures and Algorithms, OR	2	Souvik Roy	02:30 pm - 04:00 pm Tue, Thu
458	SEAS	CSE526 Advanced Computer Arithmetic: Algorithms and Sub-systems	3	OR ECE209 Digital Design	1	Mazad Zaveri	09:30 am - 11:00 am Mon, Wed
459	SEAS	CSE540 Cloud Computing	3	CSC330 Computer Networks, OR	1	Sanjay Chaudhary	11:00 am - 12:30 pm Tue, Thu
460	SEAS	CSE601 Computational Thinking	3		1	S Ramamohan	10:00 am - 11:00 am Wed, Fri, 11:00 am - 12:00 pm Wed, Fri
461	SEAS	CSE605 Advanced Data Structures and Algorithm Analysis	4		1	Amit Nanavati Souvik Roy	05:00 pm - 06:00 pm Tue, Thu, 06:00 pm - 07:00 pm Tue, Thu, 03:00 pm - 04:00 pm Mon, 04:00 pm - 05:00 pm Mon
462	SEAS	CSE618 Artificial Intelligence Laboratory	3		1	Maitrik Shah	08:00 am - 09:30 am Wed, Fri
463	SEAS	ECE210 Signals and Systems	3		1	Mehul Raval	02:30 pm - 04:00 pm Mon, Sat
464	SEAS	ECE210 Signals and Systems	3		2	Mehul Raval	10:00 am - 11:00 am Fri, 11:00 am - 12:00 pm Fri, 12:00 pm - 01:00 pm Fri
465	SEAS	ECE210 Signals and Systems	3		3	Mehul Raval	08:00 am - 09:30 am Sat
466	SEAS	ECE302 Embedded Systems Design	3	CSE2XX Computer Organization and Architecture, OR	1	Anurag Lakhlani	02:30 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

467	SEAS	ECE302 Embedded Systems Design	3	CSE2XX Computer Organization and Architecture, OR	2	Anurag Lakhlani	02:30 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
468	SEAS	ECE310 Wireless Communications	3	MAT200 Linear Algebra,	1	Dhaval Patel	11:00 am - 12:00 pm Mon, 01:00 pm - 02:00 pm Mon, 12:00 pm - 01:00 pm Mon
469	SEAS	ECE502 VLSI Design	3	OR CSE2XX Computer Organization and Architecture	1	Mazad Zaveri	11:00 am - 12:30 pm Thu, Tue
470	SEAS	ECE504 Internet of Things	3	EVD220 Embedded System Design, OR	1	Anurag Lakhlani	09:30 am - 11:00 am Mon, Wed
471	SEAS	ENR101 Product Realisation	1.5		1	Rupsa Bhowmick	08:00 am - 09:00 am Sat
472	SEAS	ENR105 Product Dissection and Realization	2		1	Hemant Chouhan	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
473	SEAS	ENR105 Product Dissection and Realization	2		2	Anamika Maurya Kanisha Kalaria	10:00 am - 11:00 am Sat, 11:00 am - 12:00 pm Sat, 12:00 pm - 01:00 pm Sat, 01:00 pm - 02:00 pm Sat
474	SEAS	ENR105 Product Dissection and Realization	2		3	Rupsa Bhowmick	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
475	SEAS	ENR106 Introduction to Programming	3		1	Jayendra Bhalodiya	02:30 pm - 04:00 pm Fri, 04:00 pm - 05:30 pm Fri, 05:30 pm - 07:00 pm Fri, 03:00 pm - 04:00 pm Fri
476	SEAS	ENR106 Introduction to Programming	3		2	Jayendra Bhalodiya	02:30 pm - 04:00 pm Fri, 04:00 pm - 05:30 pm Fri, 05:30 pm - 07:00 pm Fri, 03:00 pm - 04:00 pm Fri

477	SEAS	ENR106 Introduction to Programming	3		3	Kuntalkumar Patel	02:30 pm - 04:00 pm Fri, 04:00 pm - 05:30 pm Fri, 05:30 pm - 07:00 pm Fri, 03:00 pm - 04:00 pm Fri
478	SEAS	ENR107 Digital Electronics and Microprocessors	3		1	Ashok Ranade Maryam Kaveshgar	09:00 am - 10:00 am Mon, Wed, 10:00 am - 11:00 am Mon, 11:00 am - 12:00 pm Mon
479	SEAS	ENR107 Digital Electronics and Microprocessors	3		2	Maryam Kaveshgar Baibhav Gupta	09:00 am - 10:00 am Mon, Wed, 10:00 am - 11:00 am Wed, 11:00 am - 12:00 pm Wed
480	SEAS	ENR108 Materials and the Engineering World	3		1	Mona Jani Shuja Ahmed Bimal Das Mayuribala Mangrulkar Sunil Kale	03:00 pm - 04:00 pm Mon, Fri, Thu, 01:00 pm - 02:00 pm Thu, 02:00 pm - 03:00 pm Thu
481	SEAS	ENR110 Differential Equations in Engineering	1.5		1	Mitaxi Mehta	09:30 am - 11:00 am Tue, Thu
482	SEAS	ENR110 Differential Equations in Engineering	1.5		2	Anamika Maurya	09:30 am - 11:00 am Tue, Thu
483	SEAS	ENR110 Differential Equations in Engineering	1.5		3	Mitaxi Mehta	08:00 am - 09:30 am Tue, Thu
484	SEAS	ENR110 Differential Equations in Engineering	1.5		4	Anamika Maurya	08:00 am - 09:30 am Tue, Thu
485	SEAS	ENR112 Linear Algebra Laboratory	1		1	Bhawnath Tiwari	10:00 am - 11:00 am Mon, 11:00 am - 12:00 pm Mon
486	SEAS	ENR112 Linear Algebra Laboratory	1		2	Baibhav Gupta	10:00 am - 11:00 am Mon, 11:00 am - 12:00 pm Mon
487	SEAS	ENR112 Linear Algebra Laboratory	1		3	Mitaxi Mehta	10:00 am - 11:00 am Wed, 11:00 am - 12:00 pm Wed
488	SEAS	ENR113 Chemistry in the Engineering World	1.5		1	Aditi Singhal	02:30 pm - 04:00 pm Tue, 04:00 pm - 05:30 pm Tue
489	SEAS	ENR114 Engineering Visualization and Drawing	2		1	Dharamashi Rabari	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

490	SEAS	ENR114 Engineering Visualization and Drawing	2		2	Bhawnath Tiwari	10:00 am - 11:00 am Sat, 11:00 am - 12:00 pm Sat, 12:00 pm - 01:00 pm Sat, 01:00 pm - 02:00 pm Sat
491	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
492	SEAS	ENR203 Material Science and Engineering	2		1	Mayuribala Mangrulkar	08:00 am - 09:00 am Mon, Wed, 09:00 am - 10:00 am Mon, Wed
493	SEAS	ENR203 Material Science and Engineering	2		2	Ramya Srinivasan	08:00 am - 09:00 am Mon, Wed, 09:00 am - 10:00 am Mon, Wed
494	SEAS	ENR204 Mechanics of Rigid Bodies	2		1	Ashitava Ghosal	09:00 am - 10:00 am Mon, Wed, 10:00 am - 11:00 am Mon, Wed
495	SEAS	ENR204 Mechanics of Rigid Bodies	2		2	Bimal Das	08:00 am - 09:30 am Sat
496	SEAS	ENR205 Thermodynamics-1	2		1	Sunil Kale	01:00 pm - 02:00 pm Mon, Fri, Sat, 12:00 pm - 01:00 pm Wed
497	SEAS	ENR206 Sensors, Instruments and Experimentation	2		1	Baibhav Gupta	09:00 am - 10:00 am Sat, 10:00 am - 11:00 am Sat, 11:00 am - 12:00 pm Sat, 12:00 pm - 01:00 pm Sat
498	SEAS	ENR206 Sensors, Instruments and Experimentation	2		2	Ashok Ranade	01:00 pm - 02:30 pm Tue, 02:30 pm - 04:00 pm Tue, 04:00 pm - 05:00 pm Tue
499	SEAS	ENR206 Sensors, Instruments and Experimentation	2		3	Bhawnath Tiwari	01:00 pm - 02:30 pm Thu, 02:30 pm - 04:00 pm Thu, 04:00 pm - 05:00 pm Thu
500	SEAS	ENR208 Engineering Thermodynamics	2		1	Sunil Kale	01:00 pm - 02:00 pm Mon, Wed, Fri, 12:00 pm - 01:00 pm Wed
501	SEAS	ENR209 Mechanics of Rigid Bodies	2		1	Bimal Das	08:00 am - 09:00 am Mon, Wed, Fri, 09:00 am - 10:00 am Fri
502	SEAS	ENR209 Mechanics of Rigid Bodies	2		2	Sham Gurav Ashitava Ghosal	08:00 am - 09:00 am Mon, Wed, Fri, 09:00 am - 10:00 am Fri

503	SEAS	ENR210 Continuum Mechanics	2		1	Bimal Das	08:00 am - 09:00 am Mon, Wed, Fri, 09:00 am - 10:00 am Fri
504	SEAS	ENR210 Continuum Mechanics	2		2	Sham Gurav	08:00 am - 09:00 am Mon, Wed, Fri, 09:00 am - 10:00 am Fri
505	SEAS	ENR215 Design, Innovation and Making	2		1	Mona Jani Sunil Kale Hitesh Shrimali	01:00 pm - 02:30 pm Tue, 02:30 pm - 04:00 pm Tue, 04:00 pm - 05:00 pm Tue
506	SEAS	ENR215 Design, Innovation and Making	2		2	Mayuribala Mangrulkar Jinraj Joshipura	01:00 pm - 02:30 pm Thu, 02:30 pm - 04:00 pm Thu, 04:00 pm - 05:00 pm Thu
507	SEAS	ENR215 Design, Innovation and Making	2		3	Sham Gurav	01:00 pm - 02:30 pm Thu, 02:30 pm - 04:00 pm Thu, 04:00 pm - 05:00 pm Thu
508	SEAS	ENR305 Sensors, Instruments and Experimentation	2		1	Vinod Mall	04:00 pm - 05:30 pm Fri, 05:30 pm - 07:00 pm Fri, 03:00 pm - 04:00 pm Fri
509	SEAS	ENR305 Sensors, Instruments and Experimentation	2		2	Sanket Patel	02:30 pm - 04:00 pm Fri, 04:00 pm - 05:30 pm Fri, 05:30 pm - 07:00 pm Fri
510	SEAS	ENR305 Sensors, Instruments and Experimentation	2		3	Ashok Ranade	05:30 pm - 07:00 pm Fri, 04:00 pm - 05:30 pm Fri, 03:00 pm - 04:00 pm Fri
511	SEAS	ENR503 Machine Vision, Learning and Applications	3		1	Keyur Joshi	09:30 am - 11:00 am Sat, 11:00 am - 12:30 pm Sat
512	SEAS	ENR704 Collaborative Research Project - I	3	None	1	Aditi Singhal Aditi Singhal	08:00 am - 09:30 am Mon, Tue
513	SEAS	ENR709 Research Methodology in Engineering	3		1	Ramya Srinivasan Arijit Ganguli	02:00 pm - 03:00 pm Fri, 03:00 pm - 04:00 pm Fri, 04:00 pm - 05:00 pm Fri
514	SEAS	MAT101 Discrete Mathematics [Bi-Semester]	3		1	Eshita Mazumdar	11:00 am - 12:30 pm Tue, Thu
515	SEAS	MAT283 Calculus	3		1	Mitaxi Mehta	04:00 pm - 05:30 pm Mon, Wed
516	SEAS	MAT283 Calculus	3		2	Keyur Joshi	04:00 pm - 05:30 pm Mon, Wed

517	SEAS	MAT396 Numerical Methods	3	MAT203 Differential Equations and Linear Algebra OR MAT 246 Linear Algebra,MAT 256 Differential Equations	1	Gaurav Goswami	08:00 am - 09:30 am Fri, 09:30 am - 11:00 am Fri
518	SEAS	MAT596 Numerical Methods	3		1	Gaurav Goswami	08:00 am - 09:30 am Fri, 09:30 am - 11:00 am Fri
519	SEAS	MEC301 Dynamics of Machines and Vibrations	3	MAT203 Differential Equations and Linear Algebra,	1	Akhand Rai	08:00 am - 09:30 am Mon, Wed
520	SEAS	MEC302 Design,Materials and Manufacturing	4	ENR203 Material Science and Engineering,ENR204 Mechanics of Rigid Bodies,MEC0000 Materials and Process of Manufacture,MEC330NEW Computer Aided Design and Manufacturing,ENR100 Visualisation,ENR101 Product Realisation	1	Shuja Ahmed	01:00 pm - 02:30 pm Wed, 05:00 pm - 06:00 pm Mon, 06:00 pm - 07:00 pm Mon, 02:30 pm - 04:00 pm Mon
521	SEAS	MEC403 Manufacturing Systems and Operations	2		1	Keyur Joshi	01:00 pm - 02:00 pm Fri, 02:00 pm - 03:00 pm Fri
522	SEAS	MEC404 Integrated Mechanical Laboratory II	2		1	Bimal Das	01:00 pm - 02:30 pm Mon, 02:30 pm - 04:00 pm Mon, 04:00 pm - 05:00 pm Mon
523	SEAS	MEC405 Learning Factory Project	3		1	Hemant Chouhan	01:00 pm - 02:30 pm Thu, Tue, 02:30 pm - 04:00 pm Thu, Tue
524	SEAS	MEC510 Automobile Engineering	3		1	Akhand Rai	11:00 am - 12:30 pm Tue, Thu
525	Undergraduate College	FDP101 Democracy and Justice	3		1	Darshna Padia Gaurav Goswami Krishna Mehta Pooja Shah Purabi Bhattacharya	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu

						Raghwinder Singh	
526	Undergraduate College	FDP101 Democracy and Justice	3		2	Vinod Mall Lakshmi Sreeram Noopur Thakur Preeti Maneck Samvet Kuril Vedant Dev	09:45 am - 12:30 pm Mon, Tue, Fri, Wed, Thu, 01:30 pm - 04:00 pm Mon, Tue, Thu
527	Undergraduate College	FDP101 Democracy and Justice	3		3	Darshna Padia Gaurav Goswami Krishna Mehta Pooja Shah Purabi Bhattacharya Raghwinder Singh	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		4	Vinod Mall Lakshmi Sreeram Noopur Thakur Preeti Maneck Samvet Kuril Vedant Dev	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
529	Undergraduate College	FDP101 Democracy and Justice	3		5	Darshna Padia Krishna Mehta Pooja Shah Purabi Bhattacharya Raghwinder Singh Aditya Chaturvedi	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu

530	Undergraduate College	FDP101 Democracy and Justice	3		6	Vinod Mall Lakshmi Sreeram Noopur Thakur Preeti Maneck Samvet Kuril Vedant Dev	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
531	Undergraduate College	FDP101 Democracy and Justice	3		7	Darshna Padia Krishna Mehta Pooja Shah Purabi Bhattacharya Raghwinder Singh Aditya Chaturvedi	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
532	Undergraduate College	FDP101 Democracy and Justice	3		8	Vinod Mall Lakshmi Sreeram Noopur Thakur Preeti Maneck Samvet Kuril Vedant Dev	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		1	Keyur Joshi Arijit Ganguli Kunal Mankodi Soumen Ghosh Subhash Rajpurohit Guillaume Wadia	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		2	Kaushik Jana Bhuvan Pathak Binny Rawat Jinal Parikh Suchismita Das Amol Agrawal	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		3	Keyur Joshi Kunal Mankodi Soumen Ghosh Subhash Rajpurohit Guillaume Wadia Souvik Roy	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		4	Kaushik Jana Bhuvan Pathak Binny Rawat Jinal Parikh Amol Agrawal Kranti Vora	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		5	Keyur Joshi Arijit Ganguli Soumen Ghosh Subhash Rajpurohit Murari Jha Subhankar Saha	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		6	Kaushik Jana Bhuvan Pathak Jinal Parikh Amol Agrawal Kranti Vora Mona Jani Sutapa Mukherji	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
539	Undergraduate College	FDP102 Environment and Climate Change	3		7	Keyur Joshi Soumen Ghosh Subhash Rajpurohit Souvik Roy Murari Jha Subhankar Saha	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu

540	Undergraduate College	FDP102 Environment and Climate Change	3		8	Kaushik Jana Bhuvan Pathak Jinal Parikh Suchismita Das Amol Agrawal Mona Jani Sutapa Mukherji	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		1	Chirag Trivedi Jayendra Bhalodiya Safwan Amir Shomen Mukherjee Sridhar Dalai Zalak Shah	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		2	Ashim Rai Dharamashi Rabari Saptam Patel Snigdha Khuntia Vivek Bhatt Mansee Bhargava Jatin Christie	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		3	Chirag Trivedi Jayendra Bhalodiya Shomen Mukherjee Sridhar Dalai Zalak Shah Aditi Deo	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		4	Ashim Rai Dharamashi Rabari Saptam Patel Snigdha Khuntia Vivek Bhatt	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu

						Mansee Bhargava Jatin Christie	
545	Undergraduate College	FDP104 Water	3		5	Chirag Trivedi Safwan Amir Zalak Shah Ashutosh Kumar Shuja Ahmed Rupsa Bhowmick	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		6	Ashim Rai Dharamashi Rabari Saptam Patel Vivek Bhatt Mansee Bhargava Anamika Maurya Jatin Christie	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
547	Undergraduate College	FDP104 Water	3		7	Chirag Trivedi Zalak Shah Aditi Deo Ashutosh Kumar Rupsa Bhowmick	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu
548	Undergraduate College	FDP104 Water	3		8	Ashim Rai Dharamashi Rabari Saptam Patel Vivek Bhatt Mansee Bhargava Shuja Ahmed Anamika	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, 01:30 pm - 04:00 pm Mon, Tue, Thu

						Maurya Jatin Christie	
549	Undergraduate College	WEL100 Sports & Wellness: Athletics	1.5		1	Sonia Bathla	07:00 am - 08:00 am Mon, Thu, Tue, Sat, Wed, Fri
550	Undergraduate College	WEL100 Sports & Wellness: Athletics	1.5		2	Sonia Bathla	06:00 pm - 07:00 pm Mon, Thu, 07:00 am - 08:00 am Tue, Sat, Fri, Wed
551	Undergraduate College	WEL100 Sports & Wellness: Athletics	1.5		3	Sonia Bathla	07:00 am - 08:00 am Tue, Fri, Mon, Wed, Thu
552	Undergraduate College	WEL100 Sports & Wellness: Athletics	1.5		4	Sonia Bathla	06:00 pm - 07:00 pm Tue, Fri, 07:00 am - 08:00 am Mon, Wed, Thu
553	Undergraduate College	WEL100 Sports & Wellness: Athletics	1.5		5	Sonia Bathla	07:00 am - 08:00 am Wed, Sat, Thu, Fri, Tue, Mon
554	Undergraduate College	WEL100 Sports & Wellness: Athletics	1.5		6	Sonia Bathla	06:00 pm - 07:00 pm Wed, Sat, 07:00 am - 08:00 am Fri, Thu, Tue, Mon
555	Undergraduate College	WEL101 Sports & Wellness: Badminton	1.5		1	Sonia Bathla	07:00 am - 08:00 am Mon, Thu, 11:00 am - 12:00 pm Sat, 12:00 pm - 01:00 pm Sat
556	Undergraduate College	WEL101 Sports & Wellness: Badminton	1.5		2	Sonia Bathla	06:00 pm - 07:00 pm Mon, Thu, 09:00 am - 10:00 am Sat, 10:00 am - 11:00 am Sat
557	Undergraduate College	WEL101 Sports & Wellness: Badminton	1.5		3	Sonia Bathla	07:00 am - 08:00 am Tue, Fri, Sat, 08:00 am - 09:00 am Sat, 10:00 am - 11:00 am Sun, 11:00 am - 12:00 pm Sun
558	Undergraduate College	WEL101 Sports & Wellness: Badminton	1.5		4	Sonia Bathla	06:00 pm - 07:00 pm Tue, Fri, 03:00 pm - 04:00 pm Sat, 04:00 pm - 05:00 pm Sat

559	Undergraduate College	WEL101 Sports & Wellness: Badminton	1.5		5	Sonia Bathla	07:00 am - 08:00 am Wed, Sat, 01:00 pm - 02:00 pm Sat, 02:00 pm - 03:00 pm Sat
560	Undergraduate College	WEL101 Sports & Wellness: Badminton	1.5		6	Sonia Bathla	06:00 pm - 07:00 pm Wed, Sat, 05:00 pm - 06:00 pm Sat, 08:00 am - 09:00 am Sun, 09:00 am - 10:00 am Sun
561	Undergraduate College	WEL102 Sports & Wellness: Basketball	1.5		1	Sonia Bathla	07:00 am - 08:00 am Mon, Thu, Tue, Sat, Fri, Wed
562	Undergraduate College	WEL102 Sports & Wellness: Basketball	1.5		2	Sonia Bathla	06:00 pm - 07:00 pm Mon, Thu, 07:00 am - 08:00 am Tue, Sat, Fri, Wed
563	Undergraduate College	WEL102 Sports & Wellness: Basketball	1.5		3	Sonia Bathla	07:00 am - 08:00 am Tue, Fri, Mon, Wed, Thu
564	Undergraduate College	WEL102 Sports & Wellness: Basketball	1.5		4	Sonia Bathla	06:00 pm - 07:00 pm Tue, Fri, 07:00 am - 08:00 am Mon, Wed, Thu
565	Undergraduate College	WEL102 Sports & Wellness: Basketball	1.5		5	Sonia Bathla	07:00 am - 08:00 am Wed, Sat, Fri, Thu, Tue, Mon
566	Undergraduate College	WEL102 Sports & Wellness: Basketball	1.5		6	Sonia Bathla	06:00 pm - 07:00 pm Wed, Sat, 07:00 am - 08:00 am Fri, Thu, Tue, Mon
567	Undergraduate College	WEL103 Sports & Wellness: Cricket	1.5		1	Sonia Bathla	07:00 am - 08:00 am Mon, Thu, Tue, Sat, Fri, Wed
568	Undergraduate College	WEL103 Sports & Wellness: Cricket	1.5		2	Sonia Bathla	06:00 pm - 07:00 pm Mon, Thu, 07:00 am - 08:00 am Tue, Sat, Fri, Wed
569	Undergraduate College	WEL103 Sports & Wellness: Cricket	1.5		3	Sonia Bathla	07:00 am - 08:00 am Tue, Fri, Mon, Wed, Thu
570	Undergraduate College	WEL103 Sports & Wellness: Cricket	1.5		4	Sonia Bathla	06:00 pm - 07:00 pm Tue, Fri, 07:00 am - 08:00 am Mon, Wed, Thu
571	Undergraduate College	WEL103 Sports & Wellness: Cricket	1.5		5	Sonia Bathla	07:00 am - 08:00 am Wed, Sat, Thu, Fri, Tue, Mon

572	Undergraduate College	WEL103 Sports & Wellness: Cricket	1.5		6	Sonia Bathla	06:00 pm - 07:00 pm Wed, Sat, 07:00 am - 08:00 am Fri, Thu, Tue, Mon
573	Undergraduate College	WEL104 Sports & Wellness: Football	1.5		1	Sonia Bathla	07:00 am - 08:00 am Mon, Thu, Tue, Sat, Wed
574	Undergraduate College	WEL104 Sports & Wellness: Football	1.5		2	Sonia Bathla	06:00 pm - 07:00 pm Mon, Thu, 07:00 am - 08:00 am Tue, Sat, Wed
575	Undergraduate College	WEL104 Sports & Wellness: Football	1.5		3	Sonia Bathla	07:00 am - 08:00 am Tue, Fri, Mon, Wed, Thu
576	Undergraduate College	WEL104 Sports & Wellness: Football	1.5		4	Sonia Bathla	06:00 pm - 07:00 pm Tue, Fri, 07:00 am - 08:00 am Mon, Wed, Thu
577	Undergraduate College	WEL104 Sports & Wellness: Football	1.5		5	Sonia Bathla	07:00 am - 08:00 am Wed, Sat, Thu, Fri, Tue, Mon
578	Undergraduate College	WEL104 Sports & Wellness: Football	1.5		6	Sonia Bathla	06:00 pm - 07:00 pm Wed, Sat, 07:00 am - 08:00 am Fri, Thu, Tue, Mon
579	Undergraduate College	WEL105 Sports & Wellness: Frisbee	1.5		1	Sonia Bathla	07:00 am - 08:00 am Mon, Thu, Tue, Sat, Wed
580	Undergraduate College	WEL105 Sports & Wellness: Frisbee	1.5		2	Sonia Bathla	06:00 pm - 07:00 pm Mon, Thu, 07:00 am - 08:00 am Thu, Tue, Sat, Wed
581	Undergraduate College	WEL105 Sports & Wellness: Frisbee	1.5		3	Sonia Bathla	07:00 am - 08:00 am Tue, Fri, Mon, Wed, Thu
582	Undergraduate College	WEL105 Sports & Wellness: Frisbee	1.5		4	Sonia Bathla	06:00 pm - 07:00 pm Tue, Fri, 07:00 am - 08:00 am Mon, Wed, Thu
583	Undergraduate College	WEL105 Sports & Wellness: Frisbee	1.5		5	Sonia Bathla	07:00 am - 08:00 am Sat, Wed, Thu, Fri, Tue, Mon
584	Undergraduate College	WEL105 Sports & Wellness: Frisbee	1.5		6	Sonia Bathla	06:00 pm - 07:00 pm Wed, Sat, 07:00 am - 08:00 am Fri, Thu, Tue, Mon

585	Undergraduate College	WEL106 Sports & Wellness: Kho-Kho	1.5		1	Sonia Bathla	07:00 am - 08:00 am Mon, Thu, Tue, Sat
586	Undergraduate College	WEL106 Sports & Wellness: Kho-Kho	1.5		2	Sonia Bathla	06:00 pm - 07:00 pm Mon, Thu, 07:00 am - 08:00 am Tue, Sat
587	Undergraduate College	WEL106 Sports & Wellness: Kho-Kho	1.5		3	Sonia Bathla	07:00 am - 08:00 am Tue, Fri, Mon, Wed, Thu
588	Undergraduate College	WEL106 Sports & Wellness: Kho-Kho	1.5		4	Sonia Bathla	06:00 pm - 07:00 pm Tue, Fri, 07:00 am - 08:00 am Mon, Wed, Thu
589	Undergraduate College	WEL106 Sports & Wellness: Kho-Kho	1.5		5	Sonia Bathla	07:00 am - 08:00 am Wed, Sat, Thu, Fri, Tue, Mon
590	Undergraduate College	WEL106 Sports & Wellness: Kho-Kho	1.5		6	Sonia Bathla	06:00 pm - 07:00 pm Wed, Sat, 07:00 am - 08:00 am Thu, Fri, Tue, Mon
591	Undergraduate College	WEL107 Sports & Wellness: Squash	1.5		1	Sonia Bathla	07:00 am - 08:00 am Mon, Thu, Tue, Sat
592	Undergraduate College	WEL107 Sports & Wellness: Squash	1.5		2	Sonia Bathla	06:00 pm - 07:00 pm Mon, Thu, 07:00 am - 08:00 am Tue, Sat
593	Undergraduate College	WEL107 Sports & Wellness: Squash	1.5		3	Sonia Bathla	07:00 am - 08:00 am Tue, Fri, Mon, Wed
594	Undergraduate College	WEL107 Sports & Wellness: Squash	1.5		4	Sonia Bathla	06:00 pm - 07:00 pm Tue, Fri, 07:00 am - 08:00 am Mon, Wed
595	Undergraduate College	WEL107 Sports & Wellness: Squash	1.5		5	Sonia Bathla	07:00 am - 08:00 am Wed, Sat, Thu, Fri, Tue, Mon
596	Undergraduate College	WEL107 Sports & Wellness: Squash	1.5		6	Sonia Bathla	06:00 pm - 07:00 pm Wed, Sat, 07:00 am - 08:00 am Fri, Thu, Tue, Mon
597	Undergraduate College	WEL108 Sports & Wellness: Tennis	1.5		1	Sonia Bathla	07:00 am - 08:00 am Mon, Thu, Tue, Sat
598	Undergraduate College	WEL108 Sports & Wellness: Tennis	1.5		2	Sonia Bathla	06:00 pm - 07:00 pm Mon, Thu, 07:00 am - 08:00 am Tue, Sat
599	Undergraduate College	WEL108 Sports & Wellness: Tennis	1.5		3	Sonia Bathla	07:00 am - 08:00 am Tue, Fri, Mon, Wed

600	Undergraduate College	WEL108 Sports & Wellness: Tennis	1.5		4	Sonia Bathla	06:00 pm - 07:00 pm Tue, Fri, 07:00 am - 08:00 am Mon, Wed
601	Undergraduate College	WEL108 Sports & Wellness: Tennis	1.5		5	Sonia Bathla	07:00 am - 08:00 am Wed, Sat, Thu, Fri, Tue, Mon
602	Undergraduate College	WEL108 Sports & Wellness: Tennis	1.5		6	Sonia Bathla	06:00 pm - 07:00 pm Wed, Sat, 07:00 am - 08:00 am Fri, Thu, Tue, Mon
603	Undergraduate College	WEL109 Sports & Wellness: Volleyball	1.5		1	Sonia Bathla	07:00 am - 08:00 am Mon, Thu, Tue, Sat
604	Undergraduate College	WEL109 Sports & Wellness: Volleyball	1.5		2	Sonia Bathla	06:00 pm - 07:00 pm Mon, Thu, 07:00 am - 08:00 am Tue, Sat
605	Undergraduate College	WEL109 Sports & Wellness: Volleyball	1.5		3	Sonia Bathla	07:00 am - 08:00 am Tue, Fri, Mon, Wed
606	Undergraduate College	WEL109 Sports & Wellness: Volleyball	1.5		4	Sonia Bathla	06:00 pm - 07:00 pm Tue, Fri, 07:00 am - 08:00 am Mon, Wed
607	Undergraduate College	WEL109 Sports & Wellness: Volleyball	1.5		5	Sonia Bathla	07:00 am - 08:00 am Wed, Sat, Thu, Fri, Tue, Mon
608	Undergraduate College	WEL109 Sports & Wellness: Volleyball	1.5		6	Sonia Bathla	06:00 pm - 07:00 pm Wed, Sat, 07:00 am - 08:00 am Fri, Thu, Tue, Mon
609	Undergraduate College	WEL110 Sports & Wellness: Yoga	1.5		1	Sonia Bathla	07:00 am - 08:00 am Mon, Thu, Tue, Sat
610	Undergraduate College	WEL110 Sports & Wellness: Yoga	1.5		2	Sonia Bathla	06:00 pm - 07:00 pm Mon, Thu, 07:00 am - 08:00 am Tue, Sat
611	Undergraduate College	WEL110 Sports & Wellness: Yoga	1.5		3	Sonia Bathla	07:00 am - 08:00 am Tue, Fri, Mon, Wed
612	Undergraduate College	WEL110 Sports & Wellness: Yoga	1.5		4	Sonia Bathla	06:00 pm - 07:00 pm Tue, Fri, 07:00 am - 08:00 am Mon, Wed
613	Undergraduate College	WEL110 Sports & Wellness: Yoga	1.5		5	Sonia Bathla	07:00 am - 08:00 am Wed, Sat, Thu, Fri, Tue, Mon
614	Undergraduate College	WEL110 Sports & Wellness: Yoga	1.5		6	Sonia Bathla	06:00 pm - 07:00 pm Wed, Sat, 07:00 am - 08:00 am Fri, Thu, Tue, Mon

Course Descriptions

Monsoon Semester 2024

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 is a reading and comprehension course to train students to develop general competence and advanced analytical strategies in reading. This course prepares students to communicate in English at the level required for success in their core courses and beyond graduation.

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.

COM211 - Science Communication using Digital Media
Credits: 3

This course in science communication is designed to introduce students to the field of science writing and digital scientific illustrations. Science and technology have enabled strides toward better health and lifestyles, but daunting threats to the climate, environment and well-being demand more research and public attention. Although scientists influence policy and public perceptions, the news media are the primary way the public learns about complexities and understand successes and failures. By striving for excellence in writing and reporting about climate and health, students will join the public discourse on some of the most crucial issues of the day, help educate the public, and contribute ideas to improving the planet.

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.

COM508 - Communication Lab II
Credits: 0.75

You have always tried to be an excellent communicator, and perhaps you communicate reasonably well. But, most often, you are perceived as ineffective and not-so-confident. And then you wonder what it means to be an effective communicator in today's context. Communication Lab will help you to become an effective communicator in the business world. A successful professional in the present context believes in creating change by communicating thoughts effectively. This lab aims to transform you from a good communicator to an effective one. You will also find personal solutions to your unique problems which suit your strengths and approaches. Over the two years of your MBA degree, you will learn various strategies to enhance your speaking abilities. Through hands-on activities in the Communication Lab, you will realise who you are as a person and what is the value of your words and body language. Our activities include group work, role-plays, individual speech, and body language analysis. The emphasis of the Communication Lab is on helping you reflect on your styles and strategies rather than adopting others' traits.

COM511 - Journalism and Engaging with Media
Credits: 1.5

This course is about contemporary journalistic writing that engages with the media

COM701 - Research Writing
Credits: 3

This is a course to train young and early career researchers in the art of research writing. It takes students through the different aspects of academic writing, beginning from abstracts, reviews, research proposals and writing for a popular audience. It also trains students in presentation and oral skills, to equip them to showcase, explain, and argue about their research to a diverse audience, both lay and specialist.

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 inspects 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.

DES301 - Design Project
Credits: 6

The Design Project is a culminating experience for an individual student/interdisciplinary group of students in their final year, where they apply the learnings gathered during the elective design courses to solve a real-world problem. The project aims to use creative and innovative techniques to create better products, services, systems, processes, strategies, and experiences that meet existing or previously unidentified needs. The students will understand human needs and re-frame the problem in human-centric ways. Apply critical design thinking for problem identification and opportunity mapping in any context. They will research from the user, task, environment and company perspective and create profiles and personas. The project will create a proof of concept, mock-up or prototype, which can be tested to verify the problem solution.

DGT201 - Interactive Media and Visualisation
Credits: 3

The course introduces students to interactive media and visualisation techniques through hands-on projects and practical exercises. Students will learn various digital and Generative AI tools for creating interactive media, visualisation, and digital exhibits for knowledge dissemination in a peer-to-peer context and public communication. Students will delve into various forms of interactive media, including creating timelines, graphs, network maps, non-linear interactive text stories, 360 walkthroughs, websites and visualisation dashboards. The course will introduce students to creative coding, enabling them to craft custom visualisations, animations, and generative art. By engaging in these projects, students will understand how to effectively convey information in an interactive and visually engaging manner for projects.

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.

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

The 2008 crisis led to several questions over

economics pedagogy. Economics was increasingly seen as one-dimensional with one school dominating the thinking behind everything from pedagogy to policy. Economics is hardly a one dimensional subject and has several schools which fight, compete and shape ideas. A strong need was felt that students should undergo courses in history of economic thought which presents economics from a multidimensional and pluralistic perspective. This course on History of Economic Thought discusses how several thinkers and philosophers shaped economics theories and ideas overtime. The course discusses the origins of our current theories. Though, the course focuses mainly on Western Economic Thought, we will cover Indian Economic Thought as well.

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.

ECO292 - Machine Learning for Policy
Credits: 3

Machine learning (ML) is having a considerable impact on the economy. The relatively recent emergence of big data and vast amounts of unstructured data such as text makes its knowledge indispensable. Therefore, this course provide an introduction to ML and its applications and discusses how to analyze data from unstructured sources such as text for policy analysis. In line with these goals, I'll discuss supervised and unsupervised methods with a focus on how can be applied in economics and policy research. The first part covers supervised techniques such as lasso, ridge regression, logistic regression, and deep learning. The second part covers unsupervised methods such as clustering and dimension reduction. Some of the substantive topics covered include algorithmic fairness, economic forecasting, and predicting poverty. I'll also discuss some applications such as measuring partisanship, constructing high-dimensional data on economic activity, detecting discrimination and reducing racial disparities, and applications in labor markets. Python will be used for programming exercises.

ECO304 - Institutional Economics
Credits: 3

Economists study markets, but what are markets? Are markets where buyers and sellers aggregate to transact at an agreed-upon price? If so, how do they know where to find each other, what price to settle at and how to ensure a transaction remains enforced? In other words, how are markets formed? Most markets do not exhibit spot transactions but require long-drawn negotiations between parties. How are these negotiations carried out? Why do firms exist at all? Why are all transactions not between atomistic sellers and buyers? How do cultural norms, pre-held beliefs, and history determine the functioning of markets? Most government policies are not simply taxes and subsidies but creating quasi-regulatory bodies and alterations in decision-making bodies. How do these reforms affect economic outcomes and development? When does a central government relinquish control to sub-federal bodies, and when should it reclaim that control? These conceptually important questions are the subject of Institutional Economics, which studies "the rules, regulations, laws and norms that establish the basis for production, exchange and distribution" (Davis and North, 1971) or, in other words, determine how markets are formed. The institutional perspective considers the role of costly information, asset specificity, and property rights in market activities or allocation of scarce resources. The outcomes of this approach determine why firms exist at all, what kind of contracts exist between different firms, when firms merge or split and what role the state should perform in the functioning of markets. Institutional Economics also considers how culture of a society determines its economic activity - an area which standard textbooks neglect.

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.

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

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 course on macroeconomics designed for Master level students. In this course, we will study theoretical building blocks of macroeconomics. It aims to provide a basic and comprehensive understanding of the key fundamental concepts and topics necessary to understand an economy as a whole. In addition to introducing the various economic concepts like GDP, inflation, unemployment, interest rates etc., we will also understand their inter-linkages. 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 where concepts will be revisited as and when required in order to complete the understanding loop. Though there will be mathematical representation using equations and graphs. But the focus will be more on intuition in terms of understanding the underlying behavior which results in those representations.

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. This year the course will focus on GIG workers and Digital Businesses and identify problems and find solutions to issues based on field work and secondary data.

ECO592 - Machine Learning for Policy
Credits: 3

Machine learning (ML) is having a considerable

impact on the economy. The relatively recent emergence of big data and vast amounts of unstructured data such as text makes its knowledge indispensable. Therefore, this course provide an introduction to ML and its applications and discusses how to analyze data from unstructured sources such as text for policy analysis. In line with these goals, I'll discuss supervised and unsupervised methods with a focus on how can be applied in economics and policy research. The first part covers supervised techniques such as lasso, ridge regression, logistic regression, and deep learning. The second part covers unsupervised methods such as clustering and dimension reduction. Some of the substantive topics covered include algorithmic fairness, economic forecasting, and predicting poverty. I'll also discuss some applications such as measuring partisanship, constructing high-dimensional data on economic activity, detecting discrimination and reducing racial disparities, and applications in labor markets. Python will be used for programming exercises.

ECO633 - Economics of Networks
Credits: 3

ECO634 - Public Economics
Credits: 3

The course will focus on salient topics within the field of Public Economics, namely efficient provision of public goods, private vs public provision of public amenities, optimal taxation, fiscal federalism and decentralization, electoral systems and its impact of policies, bureaucracy, state capacity etc. The purpose of this course is twofold: firstly, to develop a conceptual framework to think about issues related to the role and primary economic functions of government and how political processes may shape that, and then look at data and analyze empirical evidence on effects of various types of policies across sectors of the economy, in the context of India and other countries, to see if patterns observed in the real world line up with the theory.

ENV210 - Energy and Climate Change
Credits: 3

This is a Core Course for the Minor in Environment and Sustainability. It is also a major elective for BA Economics. This course is intended to understand the various aspects of energy production, energy consumption and use and its relation to climate change. The course will explain what is meant by climate change, global warming, and sustainable development.The course intends to discuss some of the policy prescriptions for growth and energy use for India and other developing and developed economies as recommended by national and international bodies. This intersects with studying the energy balance of countries and its exports and imports. We also learn the aspect of providing affordable and clean energy access as part of rural electrification measures in India and the developing world. Finally, non-renewable and renewable resource management and topics in energy efficiency are covered.

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.

ENV801 - Energy-Environment Assessment Models and Applications
Credits: 3

Understanding dynamic energy systems has become a need of an hour for all the developing and developed nations across the world. The dynamic changes in global and national economic systems and structures with increasing consensus to keep global temperature rise below 1.5 degree has pushed several nations to further rethink about their current and future energy systems. To understand and predict future energy systems, energy models are developed at global and national levels. They are generally developed keeping top down and bottom up perspective to provide sound indications on future energy scenarios its linkages with economic development and total GHG emissions under different conditions. The end results of various models are than further used for formulation of key global and national policies. In recent times, energy and environment policy nexus has been among the most researched field internationally. This is evident from the numerous theoretical contributions by individuals and multi-disciplinary groups, addition of new journals, starting of new departments and centres at universities and research institutions. Integrated policy modelling has emerged as a key area of research. In recent times, scenario and modelling based assessments –integrating future emissions, impacts and adaptation strategies leading to new energy transitions and sustainable development have been the core areas of research. The course materials include is research papers, case studies and discussions in conceptual, methodological and policy domains spanning short to long time horizons and local to global geographical scales.

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.

FAC123 - Audit and Assurance
Credits: 3

In auditing, a small group of task force concentrate exclusively on internal and external audit tasks. The course develops knowledge and understanding of the functions of audit, corporate governance, including ethics and professional conduct. This course helps to understand the process of carrying out assurance engagements such as external audits as well as internal audits & their application in the context of the professional regulatory framework. This course includes the concepts of Vouching and Verification of financial reports, Audit under The Companies Act, 2013, Audit under GST Act and Audit under CIS Environment

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, it's 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 the students with the basic ideas about various cost accounting concepts & techniques and emphasize the need for management accounting in the decision-making process. The course will make the student familiar with the cost ascertainment and difficulties associated with the calculation of cost. This course consists of various cost terms and concepts; elements of cost, and the preparation of a cost sheet. The course also focuses on the concepts and implications of cost-volume-profit and break-even analysis & types of variances with their implications in standard costing. It also aims at equipping the student to apply accounting and costing techniques in preparing various types of budgets like production budgets, cash budgets, flexible budgets, and making short term 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 role of various stakeholders, such as the board of directors, auditors, managers, promoters, and institutional investors and different processes employed to promote effective corporate governance. It will also discuss the legal and regulatory framework for corporate governance in emerging economies, particularly India and highlight its managerial and policy implications.

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

Working capital is a critical factor in the sustainability of a business. At the same time, financing it can be very costly. Therefore, a proper working capital strategy and management are essential. Working capital management entails short-term financial decisions involving the firm's liquidity and default risk while maximizing shareholders' wealth. It ensures that a firm can finance its operations and pay the maturing debt obligations to avoid insolvency anxieties.

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.

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.

FAC541 - Financial Markets and Institutions
Credits: 3

Financial markets and financial institutions facilitate the flow of funds from suppliers of funds to the demander of the funds. The course provides a conceptual framework that can be used to understand why markets exist. The focus here is on money market and the capital market in terms of the securities traded and intermediaries involved. Financial services constitute an important segment of the financial system. The developments in the realm of financial services sector of an economy have a profound effect on its banking and financial system. Indeed, presence of a strong financial services sector is considered an essential adjunct for the development of an economy.

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.

FAC632 - Corporate Restructuring Mergers and Acquisitions
Credits: 3

Mergers and acquisitions (M&A) are more than a century old phenomena. Over the years, it is becoming progressively complex due to innovations in financial markets, shareholder activism and influences from politicians and other stakeholders including financial press. Every day M&As are happening in the business world but only a few large ones are making media headlines. The Competition Commission's intervention or NCLT's ruling make further additions to the M&A news. M&As are the causes and results of corporate restructuring necessitated by both ups and downs of the national economy. The

managements of the merging companies defend their M&A decisions. The employees become uneasy and skeptical about their future. The stock market reacts positively or negatively. While the overt motives behind many mergers are 'growth' through organic or inorganic combinations, the covert purposes can be driven by 'managerial hubris'. But the fact remains; most M&As are failing sooner or later as the mysterious M&A chemistry is less understood. The failure rates are more in developing economies, even though successful CEOs strike the deals. Experts are unanimous in expressing that majority of failed mergers are the results of unscientific M&A decisions but it remains an exotic bets; win some lose some.

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.

FAC636 - Financial Econometrics
Credits: 3

The purpose of this course is to acclimatize students to time series modelling and it's various applications in financial markets. Competency in Time Series Modelling (Analysis) is a prerequisite for students aspiring to take up Investment Banking Roles such as Quantitative Researcher that supports in-house trading platforms. Further, students who aspire to work for Rating Agencies such as CRISIL would also find this course immensely helpful.

FAC643 - Bank Management
Credits: 3

Banks are an important part of the financial system. An understanding of banking is a pre requisite for a successful manager in the corporate world. Managers irrespective of their functional area would find that their path crosses that of

banks at some point in their career. Knowledge of banking would help students planning a career in this sector as well as aspirants of other career streams like consulting. It would be the endeavor to cover some of the latest trends and events in banking, like the 2023 collapse of Silicon Valley bank, the near collapse and rescue of Credit Suisse, asset liability management risks that banks face etc., which may be helpful in preparing for placement. The course would provide a banker's perspective on banking. Professor/Instructor in this course will bring extensive working experience of corporate and investment banking across the globe.

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 he 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.

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.

FBE603 - Digital Entrepreneurship
Credits: 3

This course aims to teach how to effectively utilize disruptive digital technologies. It emphasizes the importance of developing a digital mindset alongside digital creativity to prepare future leaders and entrepreneurs to create digital innovations and start-ups that will leave a lasting impact on both business and society. The advent of digital technology has revolutionized the process of innovation and business operations. This course emphasizes various digital technology-based models that can expedite the growth of digital entrepreneurship. Through this course, students can explore the application of digital technologies in their business concepts and be inspired to pursue technology-based start-ups in the near future.

FBE608 - Intellectual Property Management
Credits: 1.5

This is an advanced course where learners will apply the principles of Intellectual Property Rights and know how to manage various Intellectual Property Rights. The course aims to look at both – creator/innovator/inventor's perspective and the organizational perspective as to how and why to manage the Intellectual Property Rights Portfolio. This course always aims to inform learners about the transmission of the IPR to third parties by way of License or Assignment. Enforcement of IP is also important for any organization which is also part of this course. Thus, this course deals with the IP Management and IP Enforcement Mechanisms

HRT502 - Immersion
Credits: 1.5

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: 1.5

This course will introduce key concepts and processes of conservation science. This will be expanding on to the heritage discourses but focusing mostly on the material science aspects within heritage management.

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.

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.

INT572 - Semester-long Internship
Credits: 12

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.

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 changing the world is phenomenal. The removal of constraint has created opportunities for organisations and businesses that can change lives and enterprises. Social media allows you to reach your customers and listen to them from wherever you are, mobile computing allows you and your employees to be productive from anywhere anytime. Big Data and Artificial Intelligence has led to new knowledge creation and augmentation of capabilities.Consumers and the market are fast becoming ready and welcoming to this dynamism and reality. Companies and enterprises are also realising the change. This course introduces the most recent advances and developments in digital technology that are changing the way departments, functions, and organisations work. The course aims to prepare individuals to be ready for a work environment that is digitally dynamic, technologically evolving, and most importantly changing constantly.

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 week. 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 manger/ 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.

MGT523 - Organizational Development
Credits: 3

With the continuously changing internal and external environment in which today's businesses are operating, it has become imperative for them to bring in continuous and desirable changes in their processes, products, services, operations and many times even in their culture and vision. Businesses are vying to find newer and better ways to manage their resources in the present dynamic environment. Organisation Development is a handy tool that enables organisations to bring in desirable planned changes. In the wake of the current pandemic, embracing change and shifting to newer paradigms has become a new normal for all organisations. A hybrid organisation seems almost inevitable for some time to come. This makes understanding of OD all the more pivotal and necessary. As organisations struggle with or embarks willingly on the path of change, the knowledge of OD and its process driven approach to managing change will go a long way in shaping the immediate and future concerns and aims of modern day organisations. This course aims to bring out comprehensively the basic principles of OD theory and practice, its history, the process of organisational diagnosis and how one can use various OD interventions at different unit levels (individual, group, inter-group and organisation) to facilitate the process of planned change in an organisation. This course also allows students to look at people, product and process challenges of organisations from multiple perspectives. The course aims to develop new learning and skills in the areas of observation, problem solving and decision making among the students. The course aims to foster interdisciplinary thinking and experiential learning among the students through reflections, discussions and hands-on-learning opportunities.

MGT524 - Dark Side of Organisation
Credits: 1.5

Organisations were created to achieve targets by people working towards a single goal, but in reality it is tough to achieve. Human behavior leads to multiple negative outcomes at organizational units of individuals, teams and groups.The way people may behave in organisations may not be always beneficial. Dark side behaviors typically lead to negative outcomes. Those who engage in these negative behaviors generally are aware that their actions can cause harm to others, their employer, and/or to them; hence, the instigator usually has intent. It is essential for tomorrow's managers to understand what are these behaviors how some times they may lead to functional outcomes, sometimes it may lead to nehative outcomes as well. It is essential that we understand these behaviors, as well as control, prevent, mitigate, or ameliorate their occurrences. I. Aim of the course is to understand what might be source of such behaviors in organizations and is it possible to mitigate such behaviors in organizational units.

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.

MGT541 - Business Strategy
Credits: 3

This course captures the various pillars of strategic decision making in any business. Firms have choices to make if they are to survive and prosper. Those which are strategic include: how to create value, the selection of goals, the choice of products and services to offer; the design and configuration of policies determining how the firm positions itself to compete in product-markets (i.e., competitive strategy); the choice of an appropriate level of scope and diversity; the different options in terms of directions and methods of growth - including coopetition. The course also covers the role and impact of technology on modern-day businesses, viz. how technology impacts organizations and how tech-based businesses strategize. Later, we will learn about opportunity identification with a Blue Ocean Strategy approach, before moving onto the last module of the course which focuses on strategy implementation.

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.

MGT642 - Strategies for Firms in Emerging Markets
Credits: 1.5

This elective course looks at Emerging Markets and firms therein. Often firms in Emerging markets have different environmental contexts, resources and capabilities and hence different strategy development as compared to developed market firms. The course "Strategy for Firms in Emerging Markets" is specifically designed to introduce students to these market contexts and to the relevant strategies of firms operating in emerging markets, from the lenses of small local firms, local giants, how the local firms can globalize and how firms from foreign markets can enter the emerging markets.

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, tangibalising 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 advise, 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.

MKT611 - Marketing Research
Credits: 3

This course introduces the students to the field of marketing research and provides an understanding as to how it can help managers in making better marketing decisions. It aims to provide students

with a background in research methods, to introduce them to the issues related to conducting marketing research, data analysis, and methods of evaluation related to marketing. Knowledge of these topics will enable students to both implement and evaluate marketing research during their professional careers.

MKT623 - Marketing the Intangible
Credits: 1.5

Marketing intangible offerings requires a different approach than marketing physical products. By focusing on the benefits, creating a strong brand, leveraging social proof, and using targeted messaging and content marketing, one can effectively market their intangible offering to potential customers. Intangible offerings are everywhere and all pervasive. A Consumer comes into contact with them daily. An intangible service is a service that cannot be physically touched or seen, such as consulting, education, banking, or healthcare. These services are typically performed by professionals or companies, and are often customized to meet the specific needs of individual customers.Many product driven organizations today have a strong service oriented intangible component. It is, therefore, becoming increasingly important to focus on how to best manage and market these. This course demonstrates why and how the intangible market offerings require a distinctive approach to marketing strategy for development and execution and how the intangible service aspects need to be paid attention to for a product firm.

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.

MKT653 - Digital Marketing
Credits: 3

The digital marketing course aims to cover the what, why, and how of major current digital marketing approaches including online listening and monitoring, search engine optimization, search ads, email marketing, and participating in social media. The course is woven around three key messages viz. How to establish habits for keeping up to date on emerging digital technologies relevant to business and to marketing, how to rise to the challenge of developing strategy to guide tactics and how to

identify data sources to define and track performance indicators for a firm's digital marketing activities. The course aims to familiarise participants with key aspects of digital marketing. The participant is expected to gain a beginners and working knowledge in the digital marketing domain and develop an understanding of the framework on how online marketing operates.

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.

MKT661 - Luxury Marketing
Credits: 3

According to a report by the consulting firm Bain & Company, the global market for luxury goods in 2022 was estimated at approximately $1.3 trillion. Although India is a small market for luxury goods currently (projected value of $8.5 billion in 2023), according to this report, it could reach up to $200 billion by 2030. Apple opened two stores in India this year, Louis Vuitton roped in Deepika Padukone as its first-ever Indian house ambassador, Gucci appointed Alia Bhatt as its first global ambassador from India, and Dior held its first-ever fashion show in India. These and other developments show that the Indian luxury market is ready to take off. This has been possible because of a large number of young, educated, and economically well-off Indian consumers who are exposed to global luxury brands and want to enjoy and showcase their success by buying luxury goods. In this course, Marketing Luxury Brands, the students will learn to analyze and understand the marketing mix applied to managing luxury brands. Students will learn about the sociological and psychological factors that shape the behavior of luxury consumers. They will learn what makes a product a luxury brand, where these brands are sold, and how the messaging is different for luxury brands. This course also has a set of case studies that will help the students learn to analyze real-world marketing scenarios involving luxury brands.

MKT662 - Marketing Strategy using MARKSTRAT simulations
Credits: 1.5

This hands-on course simulates marketing strategy decisions taken by a firm in a stable competitive market over ten years. Using the MARKSTRAT simulations, students will work in groups and make marketing strategy decisions for their products. The students will learn to analyze consumer research reports, market reports, etc., to inform their decisions. Students will learn the importance of analyzing competitors' decisions and responses. Students will also learn to analyze external and internal environments to make better decisions. Ultimately, the students will learn to create and deliver customer value in the long term by designing and implementing their marketing strategy in a simulated environment.

MKT702 - Academic Research in Consumer Psychology and Behaviour
Credits: 3

Academic Research in Consumer Psychology and Behavior is an individual doctoral-level course aimed at doctoral students interested in doing future research in the domain of consumer psychology and behavior. This course will familiarize such students with the different domains of consumer psychology and help them develop the thought process required to conduct research in consumer psychology and behavior domains.

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

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.

TOD310 - Predictive Analytics for Business
Credits: 3

This course is all about learning and applying knowledge of statistical model building. Students are introduced to some very basic techniques of machine learning and AI.

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 in 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 (9.2 percent in 2015-16) service sector in the world contributing about 66 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.

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.

TOD501 - Descriptive and Inferential Statistics
Credits: 1.5

NOTE: THIS COURSE WAS EARLIER CALLED TOD501 PROBABILITY AND STATISTICS.In today's business world, data is overwhelming. Every business requires its managers to manage and analyse reams of data and arrive at better decisions. A manager who relies on something other than data-driven decision-making will soon become extinct. The course introduces basic statistical tools and techniques and their applications to several areas of research and practice in public policy and management. The sessions are designed for hands-on problem-solving manually and then using statistical software.

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

Today's firms need to be more dynamic to remain competitive. It is important to not just focus on their own competencies but also create 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 in 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

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.

TOD701 - Game Theory with Applications
Credits: 3

This course is intended to introduce a PhD scholar from any stream to the domain of Game Theory and its applications' in various fields.

School of Arts and Sciences

BIO 107 - 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.

BIO 791 - Research Rotation II
Credits: 4

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).

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.

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

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, protein, etc. This course will introduce the key concepts in the context of these biomolecules and present in detail their sequence 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 computation methods – including but not limited to dynamic programming, data visualization, database management, and graph theory – to 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 computers to biological sciences. Students should be proficient with basic programming in python. Biopython and other bio-related python methods will also be introduced in this course.

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).

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.

BIO319 - Physiology of excitable cells
Credits: 3

This course is a rigorous introduction to the physiology and biophysics of excitable cells. These cells include neurons and muscle cells (skeletal and cardiac). Three broad topics will be covered: 1) the biophysics of electrically excitable membranes, 2) the cause and effect of membrane excitability on cell signalling, and 3) synaptic processes. Topics include electrochemical and osmotic equilibrium, the role of passive and active channels in determining the membrane potential, action potential generation and propagation, experimental methods to measure ion channel properties and the electrical properties of semipermeable membranes, and the process of neurotransmitter release at chemical synapses. These concepts will be extended to excitability in skeletal muscle, and cardiac muscle and pacemaker cells, muscle contraction, and regulation of muscle contraction. If time permits, we will cover the electric organ of electric fish. This is a course in cellular physiology and biophysics, and so it covers basic principles and mechanisms at the cellular level rather than systems. At the end of the course, students will be able to understand the physiological and biophysical mechanisms by which nerve and muscle cells function. This course is a prerequisite for BIO 320 (Neurobiology) which covers nervous system function in depth. BIO 319 and 320 are offered in alternate years.

BIO390 - Signal measurement and analysis for neuroscientists
Credits: 3

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 provides 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.

BIO544 - Cancer Biology
Credits: 3

What happens when cells loose regulatory control over growth, differentiation & function? The result is cancer. This course will cover the mechanisms of tumor formation, classification of tumors, pathways involved in tumorigenesis & the relationship between ageing & cancer.Abstract: Cancer is a disease thought to be induced by a combination of genetics, lifestyle & environment. Despite billions of dollars spent on cancer research every year we are still far from an universal cure for cancer. However as a result of this research our understanding of cancer has improved tremendously & we are able to treat many tumors quite successfully. This understanding has also led to a better understanding of normal cellular processes of growth & differentiation in many cases. This course will introduce you to basic mechanisms of tumorigenesis, expose you to some success stories in treating cancer & sensitize you to the heterogeneity of the disease we call cancer.

BIO552 - Computational Structural Biology
Credits: 3

Life forms exhibits extraordinary diversity in

structures both at the organism level and at the molecular level. Proteins must acquire a well define three-dimensional shape tofunction under physiological conditions. Advancement in biophysical methods havecreated a repertoire of atomic level details of different biomolecules such are proteins,DNA, RNA, etc. This course aims at understanding different concepts involved incomputational analysis of biomolecular structures. The students would learn aboutdifferent databases related to structure biology and understand the file-formats forstoring structural information. The course would provide an opportunity to learn aboutaccessing the quality of experimentally determined structures. Students would have anopportunity to understand the challenges in structural investigation of biomoleculesusing conventional experimental methods and would be able to evaluate theapplication of computational approaches to study structural biology. Over the yearstremendous advancements have been made in the field of protein structureprediction. Students would learn about different methods for structure prediction andwould be able to appreciate the opportunities and challenges in this field. In addition students would learn to model interactions between biomolecules such as protein-protein and protein-DNA interactions. The course would help students understand thesignificance of protein structure and thereby understand the mechanistic details ofprotein function. The learning from the course would enable students to pursueresearch in the field of structure based drug design.

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 elective course designed at teaching the application of biological sciences in the field of forensic investigation process using molecular biology techniques. This course covers the Introduction to Forensic Science, cutting-edge development of forensic biotechnology, DNA fingerprinting its ethics, rules and forensic aspect for identification purposes, single nucleotide polymorphisms, ancestry, and phenotypic markers. In this course, the students would also get acquainted with various basic and latest molecular biology techniques that are being used for DNA profiling. This is an advanced level course aimed at preparing the students for better understanding of the DNA profiling, certification and its importance into the Indian Judiciary System.

BIO575 - Special topics in the Life Sciences: Scientific texts in context--The DNA Papers
Credits: 3

DNA today is a fairly well-known entity, not only among biologists and historians of biology but among general public as well. Both the acronym and other terms with which it is associated—heredity, genetics, genes and mutations—have insinuated themselves into daily speech and popular culture over the past few decades. One has only to consider the number of different films and television shows where a superhero’s powers are attributed to a their genetic make-up or to mutations in their genes, the real players in the DNA story remain largely obscure. Sure, the names of Watson and Crick, and Rosalind Franklin as well as the phrase the “double helix” might be recognized by many, even if the details aren’t quite right, but how about names such as Friedrich Miescher, Albrecht Kossel or Oswald Avery to name but a few? An how many people know that DNA was first discovered way back in the nineteenth century as the stuff found in pus cells from discarded surgical bandages? Or that the inability of a fingernail to float in a sugar solution led to the design of an experiment dubbed by one renowned scientist as "the most beautiful experiment in biology"? This course surveys the history of the DNA molecule through a close reading of a series of seminal papers representing important nodes in the history and understanding of DNA, 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.

BIO775 - Special topics in the Life Sciences: Scientific texts in context--The DNA Papers
Credits: 4

DNA today is a fairly well-known entity, not only among biologists and historians of biology but among general public as well. Both the acronym and other terms with which it is associated—heredity, genetics, genes and mutations—have insinuated themselves into daily speech and popular culture over the past few decades. One has only to consider the number of different films and television shows where a superhero's powers are attributed to a their genetic make-up or to mutations in their genes, the real players in the DNA story remain largely obscure. Sure, the names of Watson and Crick, and Rosalind Franklin as well as the phrase the "double helix" might be recognized by many, even if the details aren't quite right, but how about names such as Friedrich Miescher, Albrecht Kossel or Oswald Avery to name but a few? An how many people know that DNA was first discovered way back in the nineteenth century as the stuff found in pus cells from discarded surgical bandages? Or that the inability of a fingernail to float in a sugar solution led to the design of an experiment dubbed by one renowned scientist as "the most beautiful experiment in biology"? This course surveys the history of the DNA molecule through a close reading of a series of seminal papers representing important nodes in the history and understanding of DNA, 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

Thesis work

CSC 210 - Introductions to Data Structures and Algorithms
Credits: 3

The course covers basic data structures and techniques for design and analysis of data structures with a rich set of applications in computer science, computational sciences, and operations research. The course will begin by covering the basic data structures like Lists, Stacks, Queues, Binary Search Trees, Heaps, etc. We will also introduce tools and techniques for computational analysis of these basic data structures. The latter half of this course will cover more advanced data structures such as Height Balanced Search Trees, Hash Tables, and Graphs and introduce divide and conquer algorithms for sorting and searching, and algorithms for graphs. The programming language used in the implementation of the data structures and algorithms is C or Python.

CWE500 - Creative Writing: Fiction and Non-fiction
Credits: 3

In this course, students will be exposed to techniques necessary for crafting fiction and creative non-fiction, and will be encouraged to nurture their creative and innovative abilities. The sessions will be devoted to literary form and technique and to the exploration of contemporary trends, with guest lectures by five eminent writers of the literary novel, detective novel, and creative non-fiction and journalistic writing. The classes will provide a forum for students to share their work and receive responses from professionals and peers in an encouraging and productive environment. Grades will be based on the quality

of students' creative and critical output, including their engagement with the revision process, as well as their participation in class discussion and activities. Students are strongly encouraged to read with breadth, depth, and active critical thought. Some readings on creative and critical writing will be prescribed. Students will also be asked to write reflectively on the connections between this reading and their own writing process.

FRE111 - Conversational French - I
Credits: 3

This elementary French language course aims to equip new learners with the ability to use French for everyday conversational purposes. It aims to expose students to aspects of French culture and history. As an introductory course it aims to engender an appreciation for the language and its culture(s).Students are expected undertake daily practice by revising 1-2 hours a week outside of class.

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.

HST 201 - Trade and Religion in the Indian Ocean World
Credits: 3

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.

HST 290 - Public Culture in Modern India
Credits: 3

This course in Indian cultural history explores the formation of modern publics in colonial India. What we mean by public culture here is a social space where ideas were produced, circulated and debated, consumed and reproduced through print and other media leading to the formations of different communities or public(s). We will pay particular attention to literary histories, and the linkages between vernacular literature and the formation of the regional publics. We will also explore book-culture, novels and the new print-publics they generated. The new vernacular public spheres led to various debates around forms of identities such as gender, religion, region, caste, nation etc. Through this course, we will closely examine how practices such as newspapers and magazines, education, caste conferences, new coffee houses, new medical markets, theatre and cinema led to the remaking of the general order of things in the Indian subcontinent.

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: 3

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.

HST175 - Sources of Indian Culture
Credits: 3

This survey course introduces various strands of religious beliefs and practices, intellectual traditions, visual and performing arts, literature, and statecraft practices that developed and flourished in India since c.1500 BCE. We will analyse texts from different genres in various languages, including Sanskrit, Pali, Prakrit, Persian, Arabic, Awadhi, Odia, Bangla, Kannada, Brajbhasha, Deccani Hindvi, and Urdu (in their English translations), and works of art in different media to understand the diversity of Indian culture. We will explore the continuities and changes in the country's long history and question the dominant notions of history and periodisation.

HST220 - Science, Technology, and the Making of the Modern World
Credits: 3

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.

HST260 - Methods in Intellectual History
Credits: 3

The discipline of intellectual history has been at the center of debates about meaning, context, and

the explanation of historical change. This course explores how 'intellectual history' has been defined and its relationship with philosophy, literature, and political theory. We will explore the question of how to conceptualize histories of ideas, emotions, and feelings while reviewing some of the key methodological and theoretical debates within the discipline of intellectual history. Although the History of Emotions has developed in creative, if at times tense, relation to the discipline of intellectual history, these fields clearly have a good deal to learn from—and offer—one another. And as Darrin McMahon has argued, for that reason enterprising scholars have found interesting ways to combine them.The course will review various approaches and methods in intellectual history to explore the critical relationship between ideas and history. The students will learn the textual and contextual methods in mapping the transformation of ideas over time. Some of the topics central to the organization of the course include intellectual history, historicism, Contextualism, the history of emotions, the history of space and place, the history of political thought, and global intellectual history.

IHS801 - South Asian Islams (Individual Study Course)
Credits: 3

This is a graduate level individual study course. The course introduces students to multiple frameworks through which a tradition can be studied. Currently, Islam in South Asia within humanities and social sciences tend to: a) locate the Islamic tradition through a regional centre or a primary theological interpretation; b) think through a single time frame which does not do justice to the intimate ways in which people think beyond linear temporalities when it comes to living and experiencing the plurality of Islams; c) limit analysis to minority-majority binaries around origins and patriotism. By suggesting South Asian Islams, the attempt in the course is to think through multiple interpretations of Islam under the larger aegis of 'study of religion.' This will incorporate philosophical, historical, philological, anthropological and theological perspectives through a grounded approach. Literature, poetry, texts, tarikh and adab genres, are all taken up as sources that inform the multitudes that people present while engaging with anything broadly considered Islamic within the South Asian context. Hence, the premodern and modern are all part of the course's grand attempt to rethink questions around Islam. The course is valuable to students who are interested in questions around tradition, ethics, and performance. Graduate students will write a term paper towards the end of the semester that connects to their larger thesis and work towards understanding how the region of South Asia is intimately connected to the history of one of the largest universal religions in the world.

IHS898 - Research Proposal Preparation
Credits: 0

JAP111 - Conversational Japanese - I
Credits: 3

This course will serve as one of the core/method/major specific components for Bachelor of Art (BA) in Philosophy, History and Languages (PHL) and as a free elective and General Education Requirements (GER) for students across the schools at Ahmedabad University. Nowadays, the world becoming flat and interconnected, people and goods move around across borders more than ever before. People even migrate and settle down in a different country. In Japan, the most aging society on the globe, there are many foreign employees working in a variety of fields, from social service to computer and engineering sciences. The number is increasing every year.This is an introductory language course that helps students understand every life in Japan and make students' life fulfilling for their future by enabling them to build the Japanese language with cultural sensitivities and communication skills for reading, listening, writing, speaking and interacting with people in Japan as well as the people around them such as fellow classmates in the same community and people with different backgrounds and in different situations, such at school, college, work or in their communities and beyond.

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.

LIT120 - Introduction to Hindi Literature
Credits: 3

This course is meant to acquaint the students with the basic literary traditions of the Hindi language. The course will focus on modern Hindi literature . The period starts from the last quarter of the nineteenth century. This course will introduce students to some of the major themes of modern Hindi literature like women, love, sexuality, rebellion, freedom, colonialism and partition. Under this, students will read and analyse various

literary texts and get acquainted with sensory and artistic nuances of Hindi literature. The contemporary Hindi language and its literature is the outcome of various social, cultural, and historical transitions that took place in North India over a long period of time. Studying this literature course will contribute to an understanding of the history, culture, and society of the Hindi speaking people. Also, while studying the various literary masterpieces of Hindi, students will learn to recognise the subtleties of literary style, genre, and craft and will be able to place literary sensibilities in cultural, historical, and sociological perspectives.

LIT223 - Hindi Short Story
Credits: 3

This course will introduce students to ten representative Hindi short story writers of different styles and historical and socio-political contexts. In parallel, we will discuss the work of a few literary critics interpreting these texts. Through these short stories, students will become familiar with the basic literary nuances of the genre, such as the sensibilities, narrative techniques, complexity of the plot and characters, setting of the story, the element of tension, and the like. They will understand how the short story as a creative genre is rooted in a specific historical context along with the theoretical-ideological viewpoint of the story writer. The Qissa Goi or Dastangoi (storytelling) tradition is older than the languages. The primitive humans started telling the stories as wall paintings in caves like the Maros-Pangkep Karst or Bhimbetka. Oral kathas have been the basis of epics like Ramayana-Mahabharata or the Iliad and Odyssey. Still, as a modern genre, the kahani(short story) differs from Lok Katha, the epics, and qissa.

LIT502 - Mapping the Worlds of Literature
Credits: 3

While considering modernity, it is important to note various approaches in writing and translation. East–West and Global North–Global South translations offer differing yet complementary perspectives and determine, however subtly, the choices of writers and translators. In this course, we examine theoretical texts as well as novels and essays to enable us to appreciate nuanced views of modernity at work. Modernity, then, necessitates, in this reading, a context which placemaking provides. Mapping the Worlds of Literature engages in particular with literary fiction as being a ‘modern’ genre in the Global South. Literary fiction appears to mark a transition of sorts in terms of its preoccupation with mapping our distinctive modernities–whether material (for instance, the automobile as a marker of modernity) or mental (creating emotional worlds which are rooted in place). Siting literary works in a place (or places) appears to be a strategic preference by contemporary authors. Time, however, may not be always contingent on place, and indeed we study what creates modernity in a city in connection with when modernity entered a city. The course explores also the spirit of cities and the transformations effected by the use of language in a few distinct locations—South Asia (India and Pakistan), Asia–Europe (Turkey), the Caribbean (Trinidad and Tobago), Southeast Asia (Singapore), East Asia (Korea), and Latin America (Chile). In studying how writers and translators create literary worlds particularly in the Global South—given that that is the location of the course—it is expected that students will discover resonances with the readings within their own writing and translation practice. Discussions with guest lecturers, viewing images from cities, and watching stand-up comedy will add richness and flavour to our discussions.

MAT 334 - Introductory Real Analysis
Credits: 3

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 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 (R) •Properties of R •Sequences •Series •Limits •Continuity •Differentiation •Riemann Integral

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 newtons 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 upto 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 students 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.The applications are drawn from many fieldsincluding 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.

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.

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

MAT315 - Combinatorial Enumeration
Credits: 3

Discrete Mathematics is a branch of mathematics concerned with "discrete" mathematical structures instead of "continuous". Combinatorics studies the way in which such discrete structures can be combined or arranged. One of the first questions one asks related to such discrete mathematical structures is 'How many of a certain kind are there?'. In this course, we will understand what is meant by counting discrete mathematical structures and what constitutes a good answer to such a counting question.Discrete mathematics has applications in a variety of fields and lies at the intersection of pure mathematics, applied mathematics, and computer science. This course will showcase certain objects that appear in various situations encompassing not only mathematics and computer science but also physics. While studying these objects we will also understand some of the most fundamental tools and techniques in combinatorics. If you have enjoyed solving puzzles such as 'How many ways can you tile a 2 x n board using dominoes' or ever wondered how the number of binary trees grows then you will enjoy this course. In particular, we will answer both of these questions in the course (one of them in the first week and the other towards the end of the course).

MAT515 - Combinatorial Enumeration
Credits: 3

Discrete Mathematics is a branch of mathematics concerned with "discrete" mathematical structures instead of "continuous". Combinatorics studies the way in which such discrete structures can be combined or arranged. One of the first questions one asks related to such discrete mathematical structures is 'How many of a certain kind are there?'. In this course, we will understand what is meant by counting discrete mathematical structures and what constitutes a good answer to such a counting question. Discrete mathematics has applications in a variety of fields and lies at the intersection of pure mathematics, applied mathematics, and computer science. This course will showcase certain objects that appear in various situations encompassing not only mathematics and computer science but also physics. While studying these objects we will also understand some of the most fundamental tools and techniques in combinatorics. If you have enjoyed solving puzzles such as 'How many ways can you tile a 2 x n board using dominoes' or ever wondered how the number of binary trees grows then you will enjoy this course. In particular, we will answer both of these questions in the course (one of them in the first week and the other towards the end of the course).

MAT711 - Advanced Algebra I
Credits: 3

This course serves as an introductory-level exploration into Algebra, specifically tailored for first-year PhD students. Integral to the Mathematical and Computational Sciences PhD Programme, it stands as a core component. Serving as a vital gateway to research endeavours in Algebra and its related fields, including Commutative Algebra, Algebraic number theory, and Algebraic Geometry, it equips students with foundational knowledge and skills essential for advanced academic pursuits. By delving into Abstract Algebra principles, it cultivates a versatile skill set applicable across diverse disciplines such as Quantum Computation, Computer Science, Graph Theory, Additive Number Theory, Combinatorics, and Topology, thus fostering a comprehensive understanding and application of mathematical concepts in various real-world contexts.

MAT721 - Advanced Analysis-I
Credits: 3

This course is an introduction to Graduate-Level Real Analysis. The applications of Real Analysis to Probability and Measure theory studied in this course are used in many fields including Mathematics, Statistics, Engineering, Biostatistics, Data Analysis and Financial Mathematics. Students from a mathematics background should be familiar with elementary probability theory and real analysis and also know how to write rigorous mathematics. Students from a non-mathematics background who wish to take

this course should have some understanding of rigor and theorem-proving and should be comfortable with the material covered in the courses MAT 334 Introduction to Real Analysis and STA 101 Introduction to Probability.This course will cover measure, measurable functions, integral and spaces of integrable functions. The course develops the Lebesgue Integral as a good example of Measure and Integral. Applications to Probability are given throughout the course. Knowledge of very elementary probability theory (continuous distributions, expectation) would be helpful for the applications part of the course.The course covers the following topics1. Review of Real Analysis and Riemann Integral2. Measure-Null Sets, Outer Measure, Lebesgue Measure and Properties3. Application: Probability Space, Events3. Measurable Functions-Lebesgue Measurable Functions, Properties4. Application: Random Variables, Independence5. Integral: Definition, Monotone Convergence Theorem, Dominated Convergence Theorem6. Applications: Probability Distributions, Expectation7. The Spaces L^1, L^2, L^p8. Application: Moments and IndependenceThis is a core course for the Mathematical and Computational Sciences Doctoral Program Students.

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 writing 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 a Practical Course with some writing required.

MUS104 - Fundamentals of Music and Sound
Credits: 3

From simple folk tunes to the highly cultivated Khayal, Dhrupad and Carnatic Music, from lilting Celtic songs to the dazzling polyphonic creations of Western Classical Music, from swing Jazz to modal and free Jazz, the music of wandering minstrels to edgy electronic music - the sheer variety of music is mind boggling. Underlying this diversity are fundamental elements that derive from the physicality of music as sound and its transformation into art. This course is for those who are curious about discovering these fundamental elements of music. Beginning with basic features of sound – frequency, amplitude, duration and wave form – that may be mapped to fundamental musical elements of pitch, loudness, time, and timbre, the course will explore elements such as melody, harmony, time, rhythm, texture, dynamics, instrumentation etc.

PER101 - Introduction to Persian I
Credits: 3

This course is an introduction to modern written and spoken Persian. Students acquire the skills necessary to read, write, and speak Persian at an elementary level. This course is the first in a two-part sequence. The course works through approximately half of W.M. Thackston’s Introduction to Persian. Students learn foundational grammatical forms, build essential vocabulary, and become comfortable reading and writing the Persian script. Students practice exercises inside and outside class that build on the lessons from the textbook. Students are expected undertake daily practice outside of class for at least 30 minutes.

PER201 - Intermediate Scholastic Persian - I
Credits: 3

PHI115 - Philosophy as a Way of Life: Readings from Western Philosophy
Credits: 3

This introductory course in ethics deals with the question of what is the best life for a human being. Within this larger ambit, we will explore what some philosophers have said about what

happiness might be, whether its pursuit should be taken as the guiding feature of our lives, and what sorts of actions might be considered good or bad if our goal is to achieve happiness.

PHI200 - History of Modern Western Philosophy: Metaphysics and Epistemology
Credits: 3

In this survey course, we will explore topics in metaphysics and epistemology in the key texts of seventeenth- and eighteenth-century Western philosophy. This period is the era of the emergence of the natural sciences, and several philosophical debates from this time remain influential in contemporary philosophy. We will concern ourselves with the following questions: What is the ultimate structure of reality? How might we think of the nature, source and limits of knowledge? Can we rationally prove the existence of God? What is the nature of space and time? How does the mind relate to the body? What is the nature of personal identity? Are our actions really free? In addressing these questions, we will learn about a variety of philosophical positions like rationalism, empiricism, idealism, dualism, monism, and materialism.This course is open to all students. It is a core course for students pursuing a Minor in Philosophy.

PHI235 - Philosophy of Psychology
Credits: 3

Philosophy of Psychology is an elective course for BA Psychology majors and can be taken to fulfil requirements for the Minor in Philosophy. Psychologists empirically study mind and behaviour while philosophers (of mind) conceptually analyse and develop arguments about the nature of mind/behaviour. However, there is a cross-pollination between Philosophy and Psychology. Often, the insights developed by philosophers guide the empirical work of psychologists, and similarly, the empirical findings of psychologists have implications for philosophical/theoretical accounts of mind/behaviour. In this spirit, this course discusses the broad theoretical and philosophical implications of the findings of Psychology, particularly with respect to the psychological processes of consciousness, thinking, rationality, free will, and social minds. However, it should be clarified that this course is distinct from traditional "Philosophy of Mind" courses which tend to focus on the fundamental nature of the mind; this course focuses on the empirical findings in Psychology and their theoretical (or philosophical) implications. The sample of the theoretical/philosophical implications of the empirical findings of Psychology include: (a) Do limited resource models of attention imply that we do not see everything that we could see? (b) Do we need language to think? (c) Do we possess the processes to acquire accurate knowledge about ourselves? (d) Why aren't we always rational? (e) Do we have free will? and (f) What is the nature of mental disorders?

PHI415 - Śabda, Artha, Rasa: Contours of Indian Philosophy of Language
Credits: 3

The use of language is amongst the most ubiquitous of human activities – present across cultures, geographies and times – and, one may argue, can also be considered as the singular characteristic that distinguishes our species from all others. Our unceasing application of language, however, does not imply our complete understanding of this marvel of human experience. Philosophical speculations on the nature of language are found in the Indian tradition as early as the Ṛgveda (c.1400-1000 BCE) and several conceptions were meticulously discussed by later thinkers and schools (darśana).In this course, we will look at four pivotal topics of philosophical concern on the nature of language and consider the doctrines developed within the Sanskritic tradition by studying directly from four seminal texts:(i) What is a word – is it to be conflated with the individual phonemes that comprise it (say, "c", "o" and "w" in "cow"), or is it a unitary entity beyond these? Primary text: The Sphoṭasiddhi of Maṇḍana Miśra (c.7th century CE)(ii) What is word-meaning – does a word (like "cow", say) denote an individual object or a generic property, or something else entirely? Primary text: The chapter Apohavāda from the Ślokavārttika of Kumārila Bhaṭṭa (c.7th century CE) (iii) What is sentence-meaning – how does a collection of words, when uttered in a certain order, give rise to a meaning entirely distinct from that of any of them? Primary text: The chapter Vākyārthamātṛkā-II from the Prakaraṇapañcikā of Śālikanātha Miśra (c.10th century CE)(iv) What is poetic-meaning – how do poetic sentences convey a meaning altogether distinct from the literal meaning of the sentence? Primary text: The Dhvanyāloka of Ānandavardhana (c.9th century CE), with the commentary Locana of Abhinavagupta (c.10th century CE) Students will thus be introduced to the wide variety of methodological approaches to the study of Indian Philosophy (historical-philological, philosophical, etc.) over the past century as well as the trends in current scholarship. The course will also seek to demonstrate briefly convergences as well as divergences between the Indian doctrines and contemporary (Anglo-European) theories. This course thus aims to prepare students for advanced studies and research in Philosophy.The prerequisite for this 400-level PHI course is the

completion of any one 200- or 300- level PHI / PHL course. This may be waived only after explicit approval from the Instructor. Knowledge of Sanskrit is not a prerequisite for this course as students will study all texts in English translation, but students are encouraged to take up (at least) the introductory course on Sanskrit (SAN101) to aid their understanding.

PHL210 - History of Vedanta
Credits: 3

Vedānta means the "end" or the "essence" of the Veda and the term is often used to refer to the Upaniṣads. With the composition of the Brahmasūtras/ Vedāntasūtras (c.400-450 CE), the philosophy contained in the Upaniṣads was systematized. In the eighth century CE, Śaṅkarācārya wrote a commentary on some Upaniṣads and the Brahmasūtras providing an advaita (non-dualist) interpretation of the Vedāntic texts. Further, scholars including Rāmānuja (12th century), Madhva (13th century), Vallabha (15th-16th century), and Appayyā Dīkṣita (16th century) presented their own interpretations of Vedānta. Today, Vedānta is probably the most recognisable of the premodern Brahmanical systems of thought, with Vedanta Centres peppering various parts of the world. In some popular understandings informed by developments in the nineteenth and twentieth centuries, a kind of vague non-dualism which passes off for Vedānta is often even taken to be the "essence" of "Indian philosophy". This course aims to introduce students to certain aspects of the origins and history of different kinds of Vedānta. The attempt is to present Vedānta as a part of the broader intellectual history of South Asia while demonstrating the complexity and richness of the discourse it generated.

PHL320 - Ideas of India: Gandhi, Savarkar and Ambedkar
Credits: 3

This course is woven around three key texts written by three of the most influential political philosophers of modern India: M K Gandhi's Hind Swaraj or Indian Home Rule (1909), V D Savarkar's Essentials of Hindutva (1923), and Dr. B R Ambedkar's Annihilation of Caste (1936). We will read these primary sources in the original (and in the case of Hind Swaraj in translation) to explore the divergent ideas of India that emerged through the writings of the three barristers, wherein categories like caste, nation and people became contested. We will locate these texts – and the writers – in the wider context of the British colonialism and the conversations around the emergent nationhood. Along with the primary texts, we will also read a few contemporary scholarship on these texts – and their authors – such as Ajay Skaria (2016), Anupama Rao (2009), Aishwary Kumar (2015), Kapila and Devji (2010), Joseph Alter (2000), etc.

PHY105 - Invitation to Physics
Credits: 1.5

This course provides an overview of the physicist's view of the world in the twenty first century. Topics include: orders of magnitude of physical quantities, Astrophysical Objects, Quantum Mechanics, Spacetime, Symmetries and Relativity.

PHY112 - Electromagnetic Theory
Credits: 3

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.

PHY310 - Quantum Mechanics I
Credits: 3

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: 3

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.

PHY314 - Electrical Circuits and Electronics
Credits: 3

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, especially engineering. The course covers the fundamental principles of electricity and electronics including function of various devices such as resistors, capacitors, transistors, amplifiers, and oscillators. Besides this, it also covers different types of circuits, electrical laws governing them, and their applications. The laboratory segment of the course compliments the theory by incorporating experiments which illustrate the theoretical concepts hence will of hands-on approach where students will be required to work on electrical and electronic components to realise a working circuit.

PHY321 - Laboratory Physics - Electronics
Credits: 1.5

This course is a core course of the BS (Honours) programme with major in Physics and is primarily for students majoring in Physics. Laboratory Physics - Electronics course complements the Electrical Circuits & Electronics theory course where students learn about topics related to electrical circuits, analog electronics, and digital electronics. This course incorporates experiments which are directly connected with the concepts covered in the theory course and by using a mix of experimental techniques help in further the learnings of the theory course. Students will be required to identify different electrical and electronics components, understand their role in the experiment, characterise the component, in certain cases, and setup and perform the experiment. Scientific documentation of each experiment and the findings with an oral presentation and viva is required.

PHY430 - Introductory Astrophysics
Credits: 3

This course will introduce students to the physics underlying the formation and evolution of celestial bodies such as the Sun and different kinds of Stars; the physical processes associated with the interior of stars, nuclear processes, energy transport mechanisms in stellar interiors and exteriors; physical processes associated with the evolution of Galaxies including their classification, diagnostic tools for understanding their properties; properties of the Interstellar Medium; Dynamics of stellar systems. Additionally, the course will cover concepts from the observational astronomy domain such as celestial coordinate systems, magnitudes, filter systems, extinction, color magnitude diagrams, spectra, and galaxy rotation curves. Students will have exposure to different types of astronomical data (e.g., images, spectra, multi-wavelength data) from space-based and ground-based telescopes, specific astronomy tools and software to analyze them, and application of astrophysical models to understand the physical properties of the cosmic objects. The course will include some contemporary topics in the field of Astronomy and Astrophysics, such as Exoplanets, Astrobiology & Astrochemistry. A foundational understanding of core physics subjects, such as classical mechanics, thermodynamics, electromagnetic theory, atomic and nuclear physics, waves and optics, and Python programming, will enhance students' appreciation of this course.

PHY435 - 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.

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.

PHY732 - Atmospheric Aerosols
Credits: 3

This is an elective course for PhD programme in Physics. The course aims at introducing the role of tiny particles in the atmosphere in the Earth-Atmosphere system by covering topic related to their properties, various measurement techniques, dynamics and transport and aerosol-cloud-radiation interaction and radiative forcing.

PHY733 - Laser Matter Interaction
Credits: 3

This course is divided into two parts. The first part of the course deals with the fundamental concepts required to understand laser functioning and characterisation of various laser systems. The second half of the course focuses on laser field-atom interactions. The course covers time-dependent perturbation theory, single-electron atom interaction with an electromagnetic field, and the density matrix formalism. Additionally, applications of light-atom interaction in atomic clocks and atomic magnetometry will also be discussed.

PHY797 - Research Project - I
Credits: 3

PHY798 - Research Project - II
Credits: 3

PSY 401 - Psychological Assessment and Testing Credits: 3

The Psychological Assessment and Testing course teaches you to understand why and when to use psychological assessment, and develop an understanding of the different types of assessment available. This course will help students explore the use of psychological testing – a tool that provides valuable information about perceptions, thoughts, feelings, and cognitive functioning such as learning and memory. The course teaches differences among different types of assessments, how to develop such assessments, how to validate it and get authentic information through these assessments. Students will learn to determine when to use certain types of psychological assessments, their pros and cons, and test reliability and validity. This course will provide insight into what can be tested, appropriate use of psychological tests, and how these types of tests are constructed. Helps understanding the advantages and disadvantages of psychological testing. You will also learn about ethical factors that constrain clinical assessment, how behavioural assessment can be conducted, and understand the difference between a structured and unstructured interview in psychological assessments. On completion of this course, you will have a foundation knowledge of how and why psychological assessment is performed.

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.

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.

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.

PSY405 - Drivers of Psychological Science
Credits: 3

Drivers of Psychological Science is an advanced undergraduate course that explores the social and psychological factors that shape the academic and clinical practices of psychologists. Students will delve into the cognitive processes behind theory formation, examine how personality traits and individual differences influence scientific interests, and consider the impact of social and ideological factors on intellectual and academic activities in Psychology. The course also addresses practical applications, such as distinguishing between scientific and pseudoscientific views and improving the validity of scientific findings in Psychology. By understanding the social and psychological forces that drive scientific inquiry, students will gain valuable insights into knowledge creation and become more informed and critical consumers of psychological research and practice.

PSY499 - Undergraduate Thesis
Credits: 6

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.

PSY710 - Advances in Cognitive Psychology
Credits: 3

The course aims to introduce state-of-the-art research methods in experimental psychology to study psychological processes. The course surveys recent experimental approaches in psychology. The course aims to help students to apply their conceptual knowledge in psychological processes to create novel experiments. The course offers training in experimentation on human participants. The lectures would involve critical discussion on the design of experiments by analysing alternative interpretations of the results. This is an advanced course in experimental psychology, and the content discussed will directly contribute to the research work of the student. Students will be motivated to brainstorm how to employ the discussed experiments in future research. The techniques involved in designing and performing experiments will be part of the discussion.

PSY796 - Perception in Autism Spectrum Disorder (Individual Study Course)
Credits: 3

Autism Spectrum Disorder (ASD) is characterized by atypical perceptual and cognitive processing of information available to the senses. The course will introduce ASD from a cognitive perspective with a focus on perceptual and cognitive basis of the autistic experience. The course integrates theoretical frameworks and empirical findings from cognitive psychology, developmental psychology and cognitive neuroscience to examine perceptual and cognitive markers of ASD. The ideas will be discussed with objective to translate the knowledge into diagnosis and therapy of ASD. The course will cover the basics of ASD experience and seek to provide in-depth understanding of the condition. Recent advancements in explaining ASD from the predictive coding perspective will be discussed along with ways of experimentally testing the proposal of the theory through critical reading of the predictive coding theory.

PVA 171 - 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.

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 though 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 module-based course is a Core Course for the Integrated Arts Programme. It will serve as a means to build skills and sensibilities in a range of visual and performance-oriented arts. Through hands-on introduction to the properties of the Black Box, it will show students how these properties - visual, auditory, and spatial - can be brought into their own artistic practice. The course will primarily led by University faculty who will take the students through PRACTICE sessions: (a) ideation and production of a multi-medial theatrical performance piece; (b) construction and conceptualisation of a theatrical narrative; (c) a range of multi- medial artistic practices that actively intervenes in the practice of theatre making. The art works created during the course will have the city as their main thematic. LECTURE sessions to (a) help contextualise the diverse artistic practices to which the student will be exposed to (b) help integrate these learnings with the historical context of theatre making practices in general and with the thematic context of the city in particular. (c) help develop a comprehensive understanding of what is meant by the Integrated arts and how to locate it in the Black Box.

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

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.

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

RES101 - Introduction to Research Methodology
Credits: 3

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. The process of designing and doing research is a mix of various elements including the world view and social location of the researcher (researcher positionality), the selection of what one wants to investigate (research problem/question), and how one goes about doing it (research methods). This introductory and project-based course will familiarize students with the philosophical underpinnings of research, and enable them to identify, compare and contrast different qualitative and quantitative research methods suitable for answering a question, apply their understanding to design a research project in small groups, collect and analyse data, and demonstrate basics of academic writing.

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. There will also be surprise tests to further reinforce the learning of various grammatical features. 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.

SAN201 - Reading Sanskrit Scholastic Texts: Elementary
Credits: 3

This course is the first of a set of two courses (other being SAN202) which 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 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.

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 govern

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.

SPS264 - Development and its Discontents
Credits: 3

This course will teach students to critically and qualitatively examine "development" as a practice that is used to organize and govern the world. Drawing on the disciplines of anthropology, sociology, political science, the course will take students through the history and transformation of developmentalist thinking. Students will understand how ideas about what development means have changed over time, and be able to then examine for themselves how the culture and politics, especially of India, has changed accordingly.We will read how development has been researched qualitatively, through ethnographies (long-term case studies) of the targets of development interventions, and use such ground-up perspectives to evaluate the successes and failures of development holistically. The course will examine specific thrust areas of development such as gender equality, tribal upliftment, environmental protection in terms of their achievements and shortcomings. The course is distributed into four modules that will examine (a) anthropological approaches to development and the history of development; (b) critiques of development and its power; (c) local negotiations with development interventions, and (d) new concepts beyond development. The course will thus familiarize students with the theories and concepts that have emerged to voice the various discontents with developmentalist ideas and policies. For any student planning to enter the development sector, be a benefactor, or simply an interested citizen, this course will give them the tools to engage with the phenomenon through a historical and critical lens.

SPS265 - Comparative Political Behaviour: Voters and Political Parties in India and the World
Credits: 3

This is an elective course designed for students taking the SPS major, although it is open to all senior undergraduates and masters students. India is purported to have the largest free and fair elections in the world. Indian elections are unwieldy and messy, unlike the staid affairs in the West. This course will bring together key concepts from comparative politics and studies from around the world to make sense of voters and political parties in India. We will seek to understand how voters make decisions--how does ideology and economic outcomes, and caste and religion affect voting behaviour? We will also seek to understand the tools that parties use to appeal to voters, from branding and media to money and dalals.

SPS300 - Qualitative Research Methods
Credits: 3

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.

SPS350 - SELF AND SOCIETY IN THE STUDY OF RELIGION
Credits: 3

This Enable course will serve as a major elective for the Social and Political Sciences (SPS) and as a free elective or Social Science GER for students from across the university.This course introduces students to the study of one of the most prevailing and oldest social categories across the world: religion. It specifically uses ethnographies – records, monographs, accounts of people, their culture or society based on extended fieldwork – to engage with religion as a category for analysis. Rather than an overview of multiple religions, the course is interested in exploring questions and ideas around power and practice, and engagements with and beyond the human. The course revolves around major themes that illustrate the study of religion: tradition, myth, ritual, priesthood, self and other, rationality, symbols, secularism, and modernity. It will inform students how religion structures society and disciplines selves. The course will challenge preconceived notions of religion and introduce students to critically examine embodied and ensouled systems. Sessions will be divided into two components: one will focus on theoretical approaches, concepts, and trends; while the other will attend to select ethnographies and orient students towards field approaches. Readings will be a mix of classics, contemporary debates, short films, and ethnographies. Students will be introduced to reading ethnographies, collecting field data, and writing ethnographic notes. The course is valuable to students across the disciplines of History, Philosophy, Psychology, and Social and Political Sciences. It will also help students prepare for their Undergraduate thesis.

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.

SPS496 - Individual Study: Hijras in South Asia - Gender, Subalternity and Significance
Credits: 3

This course is proposed as an independent study. This course allows the student to pursue their interest in studying queer and gender

relations outside of the man-woman binary, which no other course offers at the university at the moment. The objective of this course is to enable the student to review the literature on the hijra community in South Asia. Hijras are often bracketed under the 'third gender' category in India, most of whom are assigned males at birth who present and embrace femininity or are intersex individuals by birth. Hijras have held a lot of religious and cultural significance in India and some other South Asian countries because they are viewed as blessed and sacred beings and direct disciples of Bahuchara Mata. Hijras also usually go through the process of castration to get rid of their male genitalia and, thus, uniquely situate themselves as outside of the two binarised genders - man and woman. Hijras, who are often infertile because of the above procedures, are seen as individuals who can bless couples with fertility and prosperity, which illustrates the positions and relationships they have with the heteronormative world. Today, hijras are most commonly involved in sex work and begging due to stigma and lack of equal opportunities. Their presence and visibility produce varying affects while their gender 'abnormality' present them as the Other.The course will be guided by the following questions: 1. What is the position of the Hijras within the larger LGBTQ community and what are some of the intra-community tensions that are brought to light within ethnographies of the Hijra communities in South Asia? 2. How does the hijra community with their longer historical trajectory situate themselves in relation to the more recent politics of queerness? 3. How does place or context uniquely shape the experience of Hijras? Why is a regional approach to study Hijras communities significant? 4. One the one hand hijras as viewed as sacred beings who have the power to bless couples with fertility while on the other hand they are commonly involved in begging and sex work. How does the Hijra community navigate this supposed tension? This review of literature will be valuable as the student prepares for an undergraduate thesis on examining the hijra gender politics in Ahmedabad in Monsoon 2024 and Winter 2025. As part of this independent study, the student will be reading 5 books based on ethnographic studies on the hijra community in India and Bangladesh.

SPS700 - Research Methods in the Social Sciences
Credits: 3

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.

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, Bayesian inference, hypothesis testing, confidence intervals, sampling methods, experimental designs and linear regression

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.

CHE102 - Organic Chemistry
Credits: 1.5

CHE205 - Chemical Technology and Calculations
Credits: 3

The chemical process industries are widely encountered and play a crucial role in an industrial scenario. This course will enable understanding of chemical and physical processes, in a variety of industries. Students will be familiarized with fundamental principles and calculations employed in the industry that involve basics of material and energy balances as applied to processes and plants. Flow sheets related to several sectors, e.g. petroleum, pulp and paper, pharmaceutical, fertilizer, cement, waste processing, effluent treatment, and many others will be studied which will introduce various operations that are employed and the flow scheme of the entire plant. Various modes of operation and consequences of disruptions will be examined. Scale model making and CAD model making will be integral to the course.

CHE211 - Material and Energy Balance
Credits: 3

This course is an introduction to the principles and techniques used in the field of chemical engineering. Specifically, the course will discuss methods to systematically formulate and solve material and energy balances for a wide range of processes used in the chemical industry.

CHE300 - Mass Transfer Operations - II
Credits: 3

In this course, applications of mass transfer will be discussed. This will include distillation, liquid-liquid extraction, solid-liquid extraction and adsorption.

CHE303 - 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. This is done for both steady and unsteady state flows in laminar regime or turbulent regime. The basics of Navier-Stokes equations will also be discussed

CHE309 - Computational Fluid Dynamics
Credits: 3

Computational Fluid Dynamics (CFD) is a very important branch in aeronautical engineering, mechanical engineering, chemical engineering etc for the design and optimization of machines and equipments. The fluid dynamics in such equipments influences the heat and/or mass transfer occurring in these equipments. Knowledge of the fundamentals/basics of CFD helps in setting up of real-life industrial problems faced by the different industries and efficiently understanding and interpretation of results rather than using the commertial software packages like a black box The course would provide in a thorough and rigorous manner the solving of partial differential equations of momentum and energy by different numerical techniques,

application of boundary conditions and interpretation of results

CHE311 - Chemical Reaction Engineering-I
Credits: 2

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

CHE312 - Experiments in Fluid Flow and Heat Transfer
Credits: 1.5

The experiments are designed to verify the principles of two courses Fluid Mechanics and Heat transfer and provide hands on practice on proto type equipment

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 coves 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.

CHE503 - Pollution Control
Credits: 3

Introduction: Environment and environmental pollution Air Pollution Control: Air pollution system, Air pollutants, Need of APC, Air pollution by chemical process industry, Standards as per APC Acts and Rules, APC equipment-particulate and gaseous emissions Water Pollution Control: Constituents in wastewater, Need of WPC, Water pollution by chemical process industry, Standards as per WPC Acts and Rules, WP treatment processes and equipment Solids Waste Treatment and Disposal: Characteristics and sources of industrial wastes, Need of hazardous waste treatment and disposal, Industrial hazardous waste-related Rules, Industrial hazardous waste treatment and disposal methods Pollution Prevention: Waste audit, Reuse, recycle, recover, Cleaner production in chemical process industry, Wealth from waste, Good housekeeping, Maintenance

CHE504 - Catalysis and Catalytic Processes
Credits: 3

Study of catalysts and catalytic process is highly interdisciplinary in nature combining the concepts and applications from domains such as Chemistry, ChemicalEngineering and Material Science. This course covers the fundamentals of catalysis and has been designed to cater the need of students coming from these diverse areas. This course includes basic modes of catalytic action, classification and key concepts, Industrial applications of catalysts, desired characteristics, synthesis and characterization techniques as well as kinetics of catalytic reactions.Course Content includes: 1. Classification and introduction to catalysis2. Surface chemistry3. Materials perspective4. Analytical aspects5. Reactivity and Kinetics of catalytic reactions6. Mechanistic aspects7. Hands on laboratory based experiments on catalysis

CHE507 - Advanced Computational Fluid Dynamics
Credits: 3

Computational Fluid Dynamics (CFD) is a very important branch in chemical and mechanical engineering for the design and optimization of machines and equipments. The fluid dynamics in such equipments influences the heat and/or mass transfer occurring in these equipments.Knowledge of the fundamentals/basics of CFD helps in setting up of real-life industrial problems faced by the different industries and efficiently understanding and interpretation of results rather than using the commercial software packages like a black boxThe course would provide in a thorough and rigorous manner the solving of partial differential equations of momentum and energy by different numerical techniques, application of boundary conditions and interpretation of results. The course will also have handson sessions for simulations of flows over fundamental geometries like flat plates, cylinders and spheres and flow inside pipes, channels etc.The course would also have individual/group projects where students would simulate process equipments

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

CHE574 - Special Topic: Instrumental Methods of Analysis
Credits: 3

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.

CHY101 - Organic Chemistry
Credits: 3

This course is designed to provide a fundamental overview of organic chemistry to students interested in pursuing a career in the sciences. Upon successful completion of this class, students will understand the relationship between structure and function of molecules, the major classes of reactions, reaction energetics and mechanisms, synthesis of organic compounds, and how to determine structure via various spectroscopic techniques. There will be two lectures per week.

CSC201 - Computer Organisation
Credits: 3

Overview of Digital Sequential Circuits and its Implementation Review of digital logic circuits: Sequential circuits (counters and registers) and Moore Finite State Machines (FSM): Various methods of implementation of FSM:Implementation based on Decoders and OR gates, implementation based on two-level Multiplexers, implementation based on ROM. Introduction to Computer Organization Basic structure of micro-computer / Central Processing Unit (CPU); Concept of control bus, address bus and data bus. Concept of Instruction Set Architecture. Understanding the building blocks of micro-computer: Data memory, Instruction Memory, Register Set, Address decoding, Arithmetic-logic Unit (ALU), Program Counter (PC), Stack Memory and stack pointers, I/O registers, control unit, etc. Design of control unit: Hardwired Control (MUX based and FSM based), Microprogrammed Control (ROM based). Instruction set architecture and assembly language programming RISC and CISC Architectures; Harvard and von Neumann Architectures; Instruction format; Addressing Modes; Instruction Set for an example microprocessor (8085/AVR/MIPS/etc.) covering these category of instructions: Data Transfer; Arithmetic; Logical; Branching; Subroutine; Stack; Basic I/O and Interrupt; Assembly language programming. Basics of Memory Organization and Pipelining Introduction to memory hierarchies and organization; Cache; Introduction to Pipelining: Arithmetic Pipeline; Instruction Pipeline;

CSD100 - Introduction to Data Science
Credits: 3

Data science is an interdisciplinary area that involves recording, storing and analyzing data to gain insights and knowledge for decision making. This introductory course provides a foundation in data science for first year undergraduate students. The course covers data science process and its life cycle, data collection using sampling/surveys, ordering/organizing, data processing and visualization of data through charts and maps. Statistical fundamentals needed for analysis and interpretation of data are covered along with cases and examples related to real life applications of data science.

CSD101 - Fundamentals of Data Science
Credits: 3

Data science is an interdisciplinary area that involves recording, storing and analyzing data to gain insights and knowledge for decision making. This is an intermediate level course providing foundation in data science and programming for first year undergraduate students. The course covers data science process and its life cycle, data collection using sampling/surveys, ordering/organizing, statistical analysis and visualization of data. Cases, examples and practical applications of data science are discussed using spreadsheet and python programming.

CSD102 - Data Science
Credits: 3

This course will introduce data science that will be useful in data analytics and visualization. Students will learn basics of statistics that they will apply for data collection, data cleaning, data modeling, data analysis and data visualization

using the tools MS Excel, Tableau, Picktochart and QGIS. Students will be introduced to the Python programming for data science. Data science is an interdisciplinary area that involves recording, storing and analyzing data to gain insights and knowledge for decision making. This course is offered to first year students that emphasis on python programming and statistics. The course covers data science life cycle, data collection using sampling/surveys, organizing, processing and visualization of data using maps, charts and infographics. Descriptive statistics, probabilistic approaches, cases and practical applications of data science are discussed using spreadsheet modeling and python programming.

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 digitallogic design and covers the following broad topics • Number system • Boolean algebra • Combinational Logic • Sequential Logic • Memories • Hardware Description Language

CSE300 - Software Engineering
Credits: 3

CSE305 - Data Structures
Credits: 4

CSE332 - Operating Systems
Credits: 4

CSE340 - Operating Systems
Credits: 3

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

CSE500 - Statistical Learning
Credits: 3

Welcome to a CSE500 course on Statistical Learning. The content covers foundational to advanced statistical techniques and research methods. Students will learn to apply and analyse statistical methods effectively in various data science contexts like healthcare, finance, and social media analysis.

CSE516 - Probabilistic Graphical Models
Credits: 3

Probability theory and Graph modelling (PGM) play a key role in the design of a system across many disciplines like Artificial Intelligence, statistics, Life Sciences -computational biology, Computer Systems, Intelligent Transports,

Robotics, Economics etc. Such field treated as "the search for a coherent global conclusion from local information".The PGM framework provides a unified view for this wide range of problems, enabling efficient inference, decision-making and learning in problems with a very large number of attributes and huge datasets. PGMs bring together graph theory and probability theory and provide a flexible framework for modelling large collections of random variables with complex interactions. The course will focus mainly on three aspects: A. The core representation, including Bayesian and Markov networks, and dynamic Bayesian networks; B. Probabilistic inference algorithms, both exact and approximate; and C. Learning methods for both the parameters and the structure of graphical models. Students entering the class should have a pre-existing working knowledge of probability, statistics, and algorithms. This class will set the foundation for machine learning, predictive analytics, reinforcement learning, natural language processing etc. Students can apply PGM in any field of core computer science and engineering to handle multidimensional uncertain problems.

CSE518 - Artificial Intelligence
Credits: 3

Artificial intelligence (AI) is bound to impact 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.

CSE524 - Parallel and Distributed Systems
Credits: 3

The course has three parts. The first part overviews the basic terms and concepts in parallel and distributed computing. The second part will overview various central aspects of distributed systems: including naming, processes, concurrency, and consistency. The final part introduces 7 basic problems and through problem-solving sessions, the students will apply the earlier learned concepts in designing parallel and distributed algorithms that are not memory and network architecture specific.

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 Kooge-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 sqr_root) • 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.

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.

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

It is a classical course covering the following broad topics Introduction to signals and systems Convolution and Correlation Continuous time Fourier SeriesDiscrete time Fourier seriesContinuous time Fourier Transform Discrete time Fourier TransformDiscrete Fourier TransformFilters

ECE302 - Embedded Systems Design
Credits: 3

This course explores the design of embedded systems using AVR microcontrollers, widely used peripheral devices and C programming. The

internal architecture and features (e.g., timers, interrupts and serial communication) of ATmega32 microcontroller will be discussed in detail. The interfacing of ATmega32 with widely used peripherals (e.g., LCD displays, keyboards, DC motors, etc.) using C programming will be performed.

ECE310 - Wireless Communications
Credits: 3

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

ENG898 - Research Proposal Preparation
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.

ENG899 - Thesis Work
Credits: 0

In this course, the student will pursue the research as outlined in the research proposal. Every semester, he/she will submit a progress report and make a presentation to the Dissertation Advisory Committee.

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.

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

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 designation 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

ENR112 - Linear Algebra Laboratory
Credits: 1

ENR113 - Chemistry in the Engineering World
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 of 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

Evolution of Structural Engineering, Tacoma Narrows Bridge Collapse, Continuum Mechanics and Classification Distinction between statics and dynamics.Idealizations in engineering, Degree of freedom, Rigid Body and deformable body, Force and load, Transmissibility of a Force, Resolution of Forces, Body and Surface Forces, External and internal forcesEquilibrium of a particle, Free-Body Diagram, Equilibrium of rigid bodies, Statically indeterminacyWork, Principle of virtual work, Center of gravity of a two-dimensional bodyRectangular moment of inertia, Polar moment of inertia, Radius of gyration, Parallel-axis theoremElastic potential energy, Gravitational potential energy, Stability of equilibrium, Equilibrium in terms of potential energy, Condition for equilibrium,Axial, Bending, torsion, shear load, Real-world structuresDefinition of the beam, Slender members, Forces transmitted in a slender member,Shear and bending moment in beam, Relations among load, shear, and bending moment, Torsion in a shaftAverage normal and shear stress, bearing stress, torsional stress, allowable stress, factor of safety, Thermal stressNormal and shear strain, Poisson's ratio. elastic deformation of axially loaded members

ENR205 - Thermodynamics-1
Credits: 2

This course covers the fundamental principles of thermodynamics and physical chemistry as applied to energy systems. This course provides a foundation in fundamental thermodynamic

phenomena, including the first and second laws of thermodynamics, thermodynamic properties and equations of state.

ENR206 - Sensors, Instruments and Experimentation
Credits: 2

ENR208 - Engineering Thermodynamics
Credits: 2

This course builds up on the concepts of continuum and balance laws taught in continuum mechanics course, with classical thermodynamics treatment of the First and Second laws, irreversibility and availability, and behaviour of a pure substance and equations of state (and online data). Both control mass and control volume approaches will be considered. Applications of these concepts in energy conversion, particularly power and refrigeration cycles, will be discussed. Energy sources and their uses, and societal and environmental impacts will be discussed.

ENR209 - Mechanics of Rigid Bodies
Credits: 2

This course introduces the fundamental principles of statics and dynamics. Statics covers analysis of forces and moments on structures at rest, ensuring equilibrium. In dynamics, the motion and the forces affecting bodies in motion, covering kinematics and kinetics is discussed. The course emphasizes problem-solving, structural analysis, and the practical application of mechanics principles to engineering systems. Students develop critical thinking skills and proficiency in computational tools, preparing them to address real-world engineering challenges in mechanical systems and structures. Key topics include force systems, equilibrium, internal forces, motion analysis, and energy methods.

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.

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 deigns, 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.

ENR303 - Introduction to Composites
Credits: 3

ENR305 - Sensors, Instruments and Experimentation
Credits: 2

Teaching scheme: 4 Hours of lab/week: Credits 2 Introduction to construction and characteristics of sensors. Experiments involving application of sensors for physical quantities like temperature, pressure, force, torque, strain, velocity, acceleration, linear and angular speed and displacement, volumetric and mass flow rates, illumination, and sound level etc. Introduction to calibration of sensors and data acquisition systems.

ENR306 - Technical Communication
Credits: 1

Engineering graduates have to frequently prepare reports and make presentations. Ability at communication, in general, and technical communication, in particular, is an essential requirement in any organization. This course will be a first exposure to professional practices in technical writing which would include preparation of reports, proposals, poster presentations, oral presentations, and popular writing, amongst others. This skill will be put in practice during project and laboratory work.

ENR486 - BTech Thesis-1
Credits: 3

ENR503 - Machine Vision, Learning and

Applications
Credits: 3

This course covers three major topics: 1) Machine Vision, 2) Machine Learning and 3) related applications. A brief introduction to the first two topics will be provided to the students, while third topic could serve as a connecting bridge between theoretical and practical aspects. Nowadays, Machine learning is a buzz word that has the potential of changing lifestyle of many humans. The course is multidisciplinary and offered university wide so that a student from any engineering branch can enroll. For more details please visit the session plan.

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.

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

MAT396 - Numerical Methods
Credits: 3

This course is offered to all the UG/PG/PhD students who satisfy the prerequisites. Students should have a prior understanding of differential equations and Linear Algebra. The objective of this course is to find solutions for the system of linear equations, roots of non-linear equations, function approximation and interpolation, differentiation and integration, and solving Ordinary Differential Equations (ODEs) and Partial Differential Equations (PDEs). Besides learning the methods for algorithm development, MATLAB codes will be developed to solve mathematical problems. Towards the end of the course, students will solve term projects. To solve the term project, one requires a thorough understanding of Numerical Methods.

MAT596 - Numerical Methods
Credits: 3

This course is offered to all the PG/PhD students who satisfy the prerequisites. Students should have a prior understanding of differential equations and Linear Algebra. The objective of this course is to find solutions for the system of linear equations, roots of non-linear equations, function approximation and interpolation, differentiation and integration, and solving Ordinary Differential Equations (ODEs) and Partial Differential Equations (PDEs). Besides learning the methods for algorithm development, MATLAB codes will be developed to solve mathematical problems. Towards the end of the course, students will solve term projects. To solve the term project, one requires a thorough understanding of Numerical Methods.

MEC301 - Dynamics of Machines and Vibrations
Credits: 3

The course will cover the following topics, systematically divided into four modules to provide a better insight and depth to the students in each topic.Module I: Static and Dynamic force analysisStatic force analysis - Applied and Constraint forces, Force conventions, Free body diagrams, Superposition principle, Static Force

analysis of planar mechanismsDynamic force analysis – D Alembert's principle, Dynamic force analysis of planar mechanisms, Inertia forces and torques, Dynamic force analysis in reciprocating engines, Flywheel, Turning moment diagrams, Energy and Speed fluctuations in engine. Module II: Static and Dynamic Balancing Static and dynamic balancing, Balancing of rotating masses, Balancing a single cylinder engine, Balancing of Multi-cylinder engine, Balancing of reciprocating masses, Partial balancing in engines and its effects Module III: Control mechanisms Governors – Types, Gravity controlled governors, spring controlled governors, Properties of Governor – Sensitiveness, Hunting, Isochronism, and Stability. Gyroscopic effects in machines, Gyroscopic effects in Automobiles, ships and airplanes Module IV: Vibrations Free Vibration - Single degree of freedom system, Free vibration, Undamped and damped vibrations, Governing equations of motion, Natural frequency. Forced Vibration – Forced damped vibrations, Magnification factor, Vibration isolation and Transmissibility

MEC302 - Design, Materials and Manufacturing
Credits: 4

Lectures:-• An introduction to machine element design, including material selection, followed by design for manufacture and producing the component. • Topics include design basis, along with material selection, for various mechanical components• Introduction to Mechanical Engineering Design- Materials, Load and Stress Analysis , Deflection and Stiffness• Failure Prevention, Failures Resulting from Static Loading, Fatigue Failure Resulting from Variable Loading• Design of Various Mechanical Elements:• Keys and Couplings• Shafts and Shaft Components• Screws, Fasteners, and the Design of Nonpermanent Joints• Welding, Bonding, and the Design of Permanent Joints• Mechanical Springs• Rolling-Contact Bearings• Lubrication and Journal Bearings• Gears-General• Spur and Helical Gears• Bevel and Worm Gears• Levers, Clutches, Brakes and Flywheels• Flexible Mechanical Elements• Power Screws• Design for Manufacture (DFM)and Assembly (DFA)Practicals:-• Design exercises on the above followed by generation of manufacturing drawing, process planning, and manufacturing and measurement/quality assurance; introduction to lubrication and failure analysis. • Designing, fabricating and assembling a complete machine that comprises several components; some components will be bought out• A team of students will be given a design mandate to design, make, assemble and operate an engineered product with several components. The design will be developed in an iterative manner using principles of design for manufacture, design for assembly, safety, noise and vibration, lubrication, etc. In the semester, each team will make 2-3 machine products. They could include microprocessor's use and/or instruments. References: (1) Mech Engg Design- Shigley (2) Design of Machine Elements-V Bhandari (3) Design and Manufacture: An Integrated Approach- Rod Black

MEC403 - Manufacturing Systems and Operations
Credits: 2

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

MEC510 - Automobile Engineering
Credits: 3

The course will cover the various components of an automobile system such as engine, transmission system, braking system, suspension system, axle and steering system. The competency of analyzing the performance of vehicle is developed through this course. The students will be exposed to different aspects of an automobile such as wheel alignment and balancing, and exhaust emissions control techniques. Finally, it provides an overview of the influential automobile technologies such as electric vehicles and hybrid vehicles, etc. Unit-1 Introduction to Automobile EngineeringOverview of automobilesUnit-2 IC Engines Introduction to Engines, Four-stroke engines, Two-stroke engines, Turbocharger, SuperchargerUnit-3 Transmission and Ignition SystemClutch, Gear box, Propeller shaft, Differentials, AxlesUnit-4 Cooling and Lubrication SystemIntroduction, Methods of cooling, Air cooling system, Water cooling systemUnit 5: Chassis and Suspension SystemIntroduction and Functions, Classification of chassis, Suspension SystemsUnit 6: Braking and Steering System Introduction, Classification of brakes, Drum brake, Disc brake, Air brake,

Power brake, ABS technologyUnit 7: Fuel Supply SystemIntroduction, Types of injection, Throttle Body Fuel Injection, Multi-Port Injection, Sequential Injection, Direct InjectionUnit 8: Exhaust Emissions Control in Automobiles Introduction, Catalytic Converter, Exhaust gas recirculation (EGR)Unit 9: Recent Developments in Modern VehiclesIntroduction, Electric vehicles

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.

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

WEL106 - Sports & Wellness: Kho-Kho
Credits: 1.5

WEL107 - Sports & Wellness: Squash
Credits: 1.5

WEL108 - Sports & Wellness: Tennis
Credits: 1.5

WEL109 - Sports & Wellness: Volleyball
Credits: 1.5

WEL110 - Sports & Wellness: Yoga
Credits: 1.5