

List of Elective Courses to be offered in EVEN SEMESTER 2018 – 19

S. No.	Course Code	Title of the course	Short Name	Type of Elective Program/Other	Instructor	Credits
1	CSE2012	Image Processing	IP	Program Elective Y17 (4th Sem) CSE	Punit Jain	3
2	CSE2032	Coding Theory and Mathematical Cryptography	CTMC	Program Elective Y17 (4th Sem) CSE	Jayprakash Kar	3
1	CSE3142	Microservices Architecture and Application Development	MAAD	Program Elective Y16 (6th Sem) CSE+CCE	Hemant Kumar Mehta	3
2	CSE3071	Active Directory	AD	Program Elective Y16 (6th Sem) CSE+CCE	Bharavi Mishra	3
3	CSE3111	Parallel Computer Architecture	PCA	Program Elective Y16 (6th Sem) CSE+CCE	Sunil Kumar, Preety Singh	3
4	CSE3132	Social Network Analysis	SNA	Program Elective Y16 (6th Sem) CSE+CCE	Sakthi Balan	3
5	CSE3062	Introduction to Randomized Algorithms	IRA	Program Elective Y16 (6th Sem) CSE+CCE	Kshitiz Verma	3
6	CSE3152	Mining of Massive Datasets	MMD	Program Elective Y16 (6th Sem) CSE+CCE	Subrat K Dash	3
7	CSE3112	Cryptographic Algorithms	CRYALO	Program Elective Y16 (6th Sem) CSE+CCE	Jayprakash Kar	3
8	CSE3162	Network-on-Chip	NOC	Program Elective Y16 (6th Sem) CSE+CCE	Rimpy	3
9	ECE3071	Antenna Engineering	AE	Program Elective Y16 (6th Sem) ECE+CCE	R. Tomar, Purnendu Karmakar	3
10	ECE3061	Embedded Systems	ES	Program Elective Y16 (6th Sem) ECE+CCE	Abhishek Sharma	3
11	ECE3072	Analog VLSI Design	AVLSID	Program Elective Y16 (6th Sem) ECE+CCE	Kapil Jainwal	3
12	ECE4131	Telecommunication Switching System Network	TSSN	Program Elective Y16 (6th Sem) ECE+CCE	Purnendu Karmakar, Navneet Upadhyay	3
13	ECE3082	Cooperative Communication in Next Generation Systems	CCNGS	Program Elective Y16 (6th Sem) ECE+CCE	Divyang R	3
14	MME4011	Robotics and Industrial automation	ROBO	Program Elective Y16 (6th Sem) ME	Mohit Makkar	3
15	MME3052	Automotive Power Transmission Systems	APTS	Program Elective Y16 (6th Sem) ME	Prabin K Jha, MENF3	3

List of Elective Courses to be offered in EVEN SEMESTER 2018 – 19

S. No.	Course Code	Title of the course	Short Name	Type of Elective Program/Other	Instructor	Credits
1	CSE4102	Wearable Computing (max. 25)	WCOMP	Program Elective Y15 (8th Sem) CSE+CCE	Rahul Banerjee	3
2	CSE6072	Advanced Data Structures and Algorithms	ADSA	Program Elective Y15 (8th Sem) CSE+CCE	Sudheer S	3
3	CSE6052	Machine Learning and Pattern Recognition	MLPR	Program Elective Y15 (8th Sem) CSE+CCE	Vibhor Kant	3
4	ECE6022	Modeling and Simulation	MAS	Program Elective Y15 (8th Sem) ECE+CCE	Divyang Rawal	3
5	ECE6012	Wireless Communication	WCOM	Program Elective Y15 (8th Sem) ECE+CCE	Purnendu Karmakar, Divyang Rawal, Nikhil Sharma	3
6	MME4042	Introduction to Energy Conservation and Heat Recovery	IECHR	Program Elective Y15 (8th Sem) ME	Sandesh Chougule	3
7	MME4052	Theory of Elasticity	TOE	Program Elective Y15 (8th Sem) ME	MMENFI	3
8	MME3022	Automotive Electronics	AEL	Program Elective Y15 (8th Sem) ME+MTRE	Prabin K Jha	3
1	ECE3092	Introduction to MEMS	IMEMS	Other Elective Y16 (6th Sem)ester (CCE, ECE, ME)	Gaurav Chatterjee	3
2	HSS3102	Contemporary Fictions of South Asian Diaspora	CFSAD	Other Elective Y16 (6th Sem) (CCE, ECE, ME)	Payel Pal	3
3	HSS4082	International Economics and Soft Skills	IESS	Other Elective Y16 (6th Sem) (CCE, ECE, ME)	A.P. Singh	3
4	PHY3012	Computational Physics	COP	Other Elective Y16 (6th Sem) (CCE, ECE, ME)	Anjishnu Sarkar	3
5	PHY3022	Biomedical Engineering	BME	Other Elective Y16 (6th Sem) (CCE, ECE, ME)	Amit Neogi	3

List of Elective Courses to be offered in EVEN SEMESTER 2018 – 19

S. No.	Course Code	Title of the course	Short Name	Type of Elective Program/Other	Instructor	Credits
1	HSS4132	Consumer Psychology	CONPSY	Other Elective Y15 (8th Sem) ALL	Anu Malik	3
2	HSS4122	Gender in Indian Literature and Film	GILF	Other Elective Y15 (8th Sem) ALL	Manju Dhariwal	3
3	HSS4112	Language, Linguistics and Social Media	LLSM	Other Elective Y15 (8th Sem) ALL	Usha Kanoongo	3
4	MME3022	Automotive Electronics	AEL	Other Elective Y15 (8th Sem) CCE, CSE, ECE	Prabin K Jha	3
5	MTH3602	Graph Theory	GT	Other Elective Y15 (8th Sem) ALL	Manish Garg	3
6	PHY4042	Physics of the Universe	POU	Other Elective Y15 (8th Sem) ALL	Anupam Singh	3
7	PHY3042	Organic Electronics and Opto Electronics: Material and Applications	OEOP	Other Elective Y15 (8th Sem) ALL	G D Sharma	3

M. Tech. ECE (Y18 - 2nd Semester)

		Modeling and Simulation	MAS	Divyang Rawal		4
		Wireless Communication	WCOM	Purnendu K, Divyang R, Nikhil S		4
		Laboratory - 2	LAB-2			2
		Program Elective - 2				4
						4
		Open Elective				4
						4

M. Tech. CSE (Y18 - 2nd Semester)

		Advanced Data Structures and Algorithms	ADSA	Sudheer S		4
		Program Elective – II	WCOMP	(i) Wearable Computing	Rahul Banarjee	4
			MLPR	(ii) Machine Learning and Pattern Recognition	Vibhor Kant	4
		Program Elective – III				4
						4
		Open Elective – I				4

List of Elective Courses to be offered in EVEN SEMESTER 2018 – 19

S. No.	Course Code	Title of the course	Short Name	Type of Elective Program/Other	Instructor	Credits
--------	-------------	---------------------	------------	--------------------------------	------------	---------

M. Sc. PHY (Y18 - 2nd Semester)

	PHY6032	Electrodynamics and Electromagnetic Theory	EDET	Rakesh Tibrewala		4
	PHY6042	Quantum Mehanics - II	QM-II	Pomita Ghoshal		4
	PHY6012	Advanced Thermodynamics and Statistical Mechanics	ATSM	Ashok Garai		4
	PHY6022	Condensed Matter Physics-I	CMP-I	Subhayan Biswas		4
	PHY3012	Computational Physics	COP	Anjishnu Sarkar		4
	PHY6052	Laboratory -II	LAB-II	G D Sharma, Manish K Singh, Ashok Garai		6
		Elective course from other departments				3
	PHY6062	Seminar	SEMINAR	G D Sharma		2

M. Sc. PHY (Y17 - 4th Semester)

	PHY7012	Applied Optics	APPOP	Somnath Biswas		4
	PHY3042	Module A-Course #3 Organic Electronics and Opto Electronics: Material and Applications	OEOP	G D Sharma		4
	PHY7072	Module B-Course #4 & Module A-Course #4 Phase Transitions in Materials	PTM	Nabeyendu Das		4
	PHY7082	Module B-Course #5 Introduction to Molecular Modelling and Simulation	IMMS	Ashok Garai		4
	PHY7092	Module B-Course #6 - Physical Cosmology	PC	Anupam Singh		
	PHY7062	Laboratory-IV	LAB-IV	Somnath Biswas, Subhayan Biswas, Manish K Singh, G D Sharma		4
	PHY7111	Major Project	MPRO	Rakesh Tibrewala, Subhayan Biswas, Somnath Biswas, Nabeyendu Das		8
		Elective course from other departments				3
	PHY7022	General viva-voce	GVV	G D Sharma		3

List of Elective Courses to be offered in EVEN SEMESTER 2018 – 19

S. No.	Course Code	Title of the course	Short Name	Type of Elective Program/Other	Instructor	Credits
--------	-------------	---------------------	------------	--------------------------------	------------	---------

M. Sc. MTH (Y18 - 2nd Semester)

	MTH6031	Probability & Statistics	P&S	Sunil Gauttam, Vikas Gupta, Dheerendra Mishra, Rajkumar Mistri	4
	MTH6022	Analysis-II	ANA-II	Pratibha Garg	4
	MTH6032	Complex Analysis	CA	Rajkumar Mistri	4
	MTH6052	Numerical Analysis	NA	Vikas Gupta	4
	MTH4042	Ordinary Differential Equations	ODE	M K Kadalbajoo	4

M. Sc. MTH (Y17 - 4th Semester)

	MTH7041	Mathematical Methods	MATMET	Harsh Trivedi	4
	MTH3602	Other Elective-III - Graph Theory	GT	Manish Garg	4
	MTH7022	Other Elective-IV - Finite Element Method	FEM	Ajit Patel	4
	MTH3302	Other Elective-V - Numerical Linear Algebra	NLA	Somnath Maiti	4
	MTH7012	Project	PROJECT	???	4