## **Main Phase Selected New Courses**

Course	Course Name	Course	Status	Allotted to					
ID		Type		Principal Developer	Institute	Coordinator			
1. Computer Sciences & Engineering									
1	DIGITAL LOGIC DESIGN	Core	New	Dr. Shubhajit Roy Chowdhury	IIIT , Hyderabad	Prof. Sandhya Kode			
2	DISCRETE STRUCTURES	Core	New	Dr. Tanuja Srivastava	IIT Roorkee	Prof. Amita Sinval / Prof. H. R. Wason			
3	DATA STRUCTURES AND ALGORITHMS	Core	New	Dr. Amitabha Bagchi	IIT Delhi	Prof. Shankar Prakriya			
4	COMPUTER ORGANIZATION AND ARCHITECTURE	Core	New	Dr. Jatindra Kr. Deka	IIT Guwahati	Dr. Jatindra Kr. Deka			
5	COMPILER DESIGN	Core	New	Dr. G.V.S.N.R.V. PRASAD	Gudlavalleru Engineering College	Prof. Somayajulu,			
6	OPERATING SYSTEMS	Core	New	Dr (Ms) Mary Saira Bhanu S	NIT Trichy	Dr.T.K.Radhakrishnan,			
7	COMPUTER NETWORKS	Core	New	Dr. Soumya Kanti Ghosh	IIT Kharagpur	Prof B. Bhattacharya			
8	FILE STRUCTURES	Core	New	Dr.K.Ramesh	NIT Warangal	Prof. Somayajulu			
9	PRINCIPLES OF PROGRAMMING LANGUAGES	Core	New	Dr.K.Vivekanandan	Pondicherry Engineering College	Prof. Somayajulu			
10	MOBILE COMPUTING	Elective	New	Dr S K Ghosh	IIT, Kharagpur	Prof B. Bhattacharya			
11	OBJECT ORIENTED MODELING AND DESIGN	Elective	New	Dr.V.S.Shankar Sriram	SASTRA University	Dr.N.Sairam			
12	MICROPROCESSORS AND INTERFACING	Elective	New	Dr.A.Umamakeswari	SASTRA University	Dr.N.Sairam			
13	SOFT COMPUTING TECHNIQUES	Elective	New	Dr. Jaya Sil	NIT Durgapur	Prof. N. K. Roy			
14	DISTRIBUTED COMPUTING	Elective	New	Prof. Sushanta Karmakar	IIT Guwahati	Prof. Jatin Deka			
15	COMPUTER GRAPHICS AND MULTIMEDIA SYSTEMS	Elective	New	Dr Pinaki Mitra	IIT Guwahati	Prof. Jatin Deka			
16	WEB PROGRAMMING	Elective	New	Dr.S.R.Balasundaram	NIT Trichy	Dr.T.K.Radhakrishnan			

2. Electronics and Communications Engineering									
1	SIGNALS AND SYSTEMS	Core	New	Prof. S D Joshi	IIT Delhi	Prof. Shankar Prakriya			
2	ANALOG ELECTRONIC CIRCUITS	Core	New	Prof. Shouribrata Chatterje	IIT Delhi	Prof. Shankar Prakriya			
3	DIGITAL COMMUNICATIONS	Core	New	Prof. Surendra Prasad	IIT Delhi	Prof. Shankar Prakriya			
4	DIGITAL SIGNAL PROCESSING	Core	New	Dr. Monika Aggarwal	IIT Delhi	Prof. Shankar Prakriya			
5	ANTENNA THEORY	Elective	New	Prof. N.V.S.N. Sarma	NIT Warangal	Prof. Somayajulu			
6	STATISTICAL SIGNAL PROCESSING	Elective	New	Prof. Kishore Prahallad	IIIT HY	Prof. Sandhya Kode			
7	CODING THEORY	Elective	New	Prof. Ranjan Bose	IIT Delhi	Prof. Shankar Prakriya			
8	ROBOTICS AND AUTOMATION	Elective	New	Prof. S K Saha	IIT Delhi	Prof. Shankar Prakriya			
9	INFORMATION THEORY	Elective	New	Dr. Manav Bhatnagar	IIT Delhi	Prof. Shankar Prakriya			
10	ANALOG INTEGRATED CIRCUITS	Elective	New	Dr.S.Jayalalitha	SASTRA University	Prof. N.Sairam			
3.									
1	ELECTRICAL MEASUREMENTS AND INSTRUMENTATION	Core	New	Dr. Chiranjib Koley	NIT, Durgapur	Prof. N. K. Roy			
2	POWER ELECTRONICS	Core	New	Prof. G Bhuvaneswari	IIT Delhi	Prof. Shankar Prakriya			
3	ELECTROMAGNETIC THEORY AND APPL	Core	New	Dr. Saradindu Ghosh	NIT, Durgapur	Prof. N. K. Roy			
5	ADVANCED CONTROL SYSTEMS	Elective	New	Prof. Bidyadhar Subudhi	NIT Rourkela	Prof. S.K.Patra			
6	ADVANCE ELECTRICAL MACHINES	Elective	New	Dr. PRAVEEN KUMAR	IIT GUWAHATI	Prof. J. K. DEKA			
7	POWER SYSTEMS PROTECTION	Elective	New	Prof. D SURYANARAYANA	SMIT	Prof. N. K. Roy			
8	OPTO-ELECTRONICS BASED INSTRUMENTATION	Elective	New	Prof. P. Kumbhakar	NIT, Durgapur	Prof. N. K. Roy			
9	RENEWABLE AND DISTRIBUTED ENERGY SYSTEMS	Elective	New	Dr. Sankar Narayan Mahato	NIT, Durgapur	Prof. N. K. Roy			
10	ENERGY MANAGEMENT AND ENERGY AUDIT	Elective	New	Dr. Ranjit Roy	S.V.NIT, Surat	Dr. Shailendra Kumar / Dr. J Parikh			
11	ADVANCED POWER SYTEM	Elective	New	Dr. P. Acharjee	NIT, Durgapur	Prof. N. K. Roy			

4. <b>M</b>	echanical Engineering					
1	CASTING, FORMING AND WELDING	Core	New	Dr. H. K. Raval	SVNIT Surat	Dr. Shailendra Kumar / Dr. J Parikh
2	MACHINE DESIGN	Core	New	Prof. S K Saha	IIT Delhi	Prof. Shankar Prakriya
3	TRIBOLOGY	Elective	New	Prof. Prasanta Sahoo	Jadavpur University	Prof. Souvik Bhattacharyya
4	DESIGN OF THERMAL SYSTEMS	Elective	New	Prof. Achintya Mukhopadhyay	IIT Madras	Prof. Souvik Bhattacharyya
5	INTERNAL COMBUSTION ENGINES & AUTOMOBILE ENGINEERING	Elective	New	Dr.G.Amba Prasad Rao	NIT Warangal	Prof. Somayajulu,
6	COMBUSTION	Elective	New	Prof. Amitava Datta	Jadavpur University	Prof. Souvik Bhattacharyya
5. C	Chemical Engineering					
1	CHEMICAL PROCESS CALCULATIONS	Core	New	Dr. Gaurav	IIT Roorkee	Prof. Amita Sinval / Prof. H.R. Wason
2	CHEMICAL REACTION ENGINEERING-I	Core	New	Dr. Jigisha K Parikh	SVNIT, Surat	Dr. Shailendra Kumar / Dr. J Parikh
3	MASS TRANSFER OPERATIONS-I	Core	New	Dr. Susmita Dutta	NIT Durgapur	Prof. N. K. Roy
4	MECHANICAL OPERATIONS	Core	New	Dr. Z. V. P. Murthy	SVNIT, Surat	Dr. Shailendra Kumar
5	MASS TRANSFER OPERATIONS-II	Core	New	Dr. Chandan Das	IIT Guwahati	Dr. J.K. Deka
6	CHEMICAL REACTION ENGINEERING-	Core	New	Prof. Aloke Kumar Ghoshal	IIT Guwahati	Dr. J.K. Deka
7	INSTRUMENTATION AND PROCESS CONTROL	Core	New	Dr. T. K. Radhakrishnan	NIT Trichy	Dr. T. K. Radhakrishnan
8	CHEMICAL ENGINEERING PLANT DESIGN AND ECONOMICS	Core	New	Prof. B. Mohanty	IIT Roorkee	Prof. H.R. Wason
9	ENERGY TECHNOLOGY	Elective	New	Prof. Anil Verma	IIT Guwahati	Dr. J.K. Deka
10	POLYMER SCIENCE AND TECHNOLOGY	Elective	New	Dr.Sudipta Goswami	BIT MESRA	Dr.Shraddha Shivani
11	PETROLEUM REFINING AND PETROCHEMICAL TECHNOLOGY	Elective	New	Dr. Ramagopal Uppaluri	IIT Guwahati	Dr. J.K. Deka
12	FLUIDIZATION ENGINEERING	Elective	New	Dr. P. R. Naren	SASTRA University	Dr. N. Sairam

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13	CHEMICAL SYSTEMS MODELING	Elective	New	Dr. Murali Rangarajan	Amrita Vishwa Vidyapeetham	Prof. Kamal Bijlani
14	SUSTAINABILITY AND GREEN CHEMISTRY	Elective	New	Dr. S. S. Bhagawan	Amrita Vishwa Vidyapeetham	Prof. Kamal Bijlani
15	NOVEL SEPARATION TECHNIQUES	Elective	New	Dr. Y.PYDI SETTY	NIT Warangal	Prof. Somayajulu,
16	CATALYSIS IN REFINING AND PETROCHEMICALS	Elective	New	Dr. Shishir Sinha	IIT Roorkee	Prof. Amita Sinval / Prof. H.R. Wason
6. Civ	vil Engineering					
1	STRUCTURAL ANALYSIS-I	Core	New	Prof. Anupam Chakrabarti	IIT Roorkee	Amita Sinval
2	DESIGN OF RC STRUCTURE	Core	New	Prof. Pronab Roy	N.I.T. Durgapur	Prof. N.K.Roy
3	SOIL MECHANICS	Core	New	Dr. Neelima Satyam D	IIIT-Hyderabad	Prof. Sandhya Kode
4	STRUCTURAL DYNAMICS AND EARTHQUAKE ENGG	Core	New	Prof. Kaustubh Dasgupta	IIT Guwahati	Dr. Jatindra Kr. Deka
5	HYDROLOGY & FLOOD CONTROL	Elective	New	Dr. P L Patel	SVNIT Surat	Dr. Shailendra Kumar / Dr. J Parikh
6	SOLID WASTE MANAGEMENT	Elective	New	Dr MATLI CHANDRA SEKHAR	NIT Warangal	Prof. Somayajulu
7	RISK AND RELIABILITY ANALYSES OF CIVIL INFRASTRUCTURE STRUCTURE	Elective	New	Prof. Rajib Chowdhury	IIT Roorkee	Prof. Amita Sinval
7. 1st	and 2nd Semester courses					
1	ENGINEERING DRAWING	DEPTH	New	Dr. A. Venu Gopal	NIT Warangal	Prof. Somayajulu
2	FUNDAMENTALS OF COMPUTERS & PROGRAMMING	DEPTH	New	Prof. Michael Arock	NIT, Trichy	Dr.T.K.Radhakrishnan
3	ENVIRONMENTAL SCIENCE	DEPTH	New	Dr Usha Jha	BIT, Mesra,	Dr S Shivani
4	ENGINEERING CHEMISTRY	DEPTH	New	Dr. Saritha.A	Amrita Vishwa Vidyapeetham	Prof. Kamal Bijlani
5	ENGINEERING PHYSICS	DEPTH	New	Dr.C.O.Sreekala	Amrita Vishwa Vidyapeetham	Prof. Kamal Bijlani
6	INTRODUCTION TO	DEPTH	New	Dr. Shailendra Kumar	S.V.NIT, Surat	Dr. Shailendra Kumar /

	MANUFACTURING PROCESSES					Dr. J Parikh
7	BASIC ELECTRONICS	DEPTH	New	Dr. Shubhajit Roy Chowdhury	IIIT Hyderabad	Prof. Sandhya Kode

## **Pilot Phase Courses Selected for Main phase**

Course	Course Name	Course	Status	Allotted to					
ID		Type		Principal Developer	Institute	Coordinator Remarks			
1. Computer Sciences & Engineering									
1	SOFTWARE ENGINEERING	Core	Pilot	Prof. Rajib Mall	IIT Kharagpur	Prof B. Bhattacharya			
2	AUTOMATA THEORY AND FORMAL LANGUAGES	Core	Pilot	Prof. T Ramesh	NIT Warangal	Prof. Somayajulu			
3	DATABASE MANAGEMENT SYSTEMS	Core	Pilot	Prof. R. C. Josi	IIT Roorkee	Prof. Amita Sinval / Prof. H.R. Wason			
4	DATA WAREHOUSING	Elective	Pilot	Prof. Somayajulu	NIT Warangal	Prof. Somayajulu,			
5	DATA MINING	Elective	Pilot	Prof. R B V Subramanyam	NIT Warangal	Prof. Somayajulu,			
6	EMBEDDED SYSTEMS	Elective	Pilot	Prof. Aurobinda Routray	IIT KGP	Prof B. Bhattacharya			
7	SOFTWARE TESTING	Elective	Pilot	Prof. Gopalaswamy Ramesh	IIIT Bangalore	IIIT Bangalore			
8	CRYPTOGRAPHY AND APPLICATION	Elective	Pilot	Prof. B B Amberker	NIT Warangal	Prof. Somayajulu,			
9	INTRODUCTION TO ALGORITHM DESIGN	Elective	Pilot	Prof. Partha Pratim Chakraborty	IIT KGP	Prof B. Bhattacharya			
10	COMPUTER VISION AND APPLICATION	Elective	Pilot	Prof. M K Bhuyan	IIT Guwahati	Prof. Jatin Deka			
2. Elec	z. Electronics and Communications Engineering								
1	CIRCUIT THEORY/ LINEAR	Core	Pilot	Prof. K Radhakrishna	IIIT	Prof. N J Rao			

	ELECTRICAL NETWORKS			Rao	Bangalore	
2	DIGITAL ELECTRONICS	Core	Pilot	Prof. Indrajit Chakrabarti	IIT KGP	Prof B. Bhattacharya
3	ENGINEERING ELECTROMAGNETICS	Core	Pilot	Prof. Dharmarendra Singh	IIT Roorkee	Prof. Amita Sinval / Prof. H. R. Wason
4	COMMUNICATIONS ENGINEERING/ ANALOG COMMUNICATION SYSTEMS	Core	Pilot	Prof. S J Thiruvengadam	IIIT Bangalore	Prof. N J Rao
5	CONTROL ENGINEERING	Core	Pilot	Prof. S Mukhopadhyay	IIT KGP	Prof B. Bhattacharya
6	SEMICONDUCTOR DEVICES AND TECHNOLOGY	Core	Pilot	Prof. S. Dasgupta	IIT Roorkee	Prof. H. R. Wason
7	NETWORK ANALYSIS AND SYNTHESIS / NETWORK THEORY	Elective	Pilot	Debasish Datta	IIT KGP	Prof B. Bhattacharya
8	WIRELESS COMMUNICATIONS/ MOBILE COMMUNICATIONS	Elective	Pilot	Prof. Sarat Kumar Patra	NIT Rourkela	Prof. Sarat Kumar Patra
9	DIGITAL IMAGE PROCESSING	Elective	Pilot	Prof. G Harit	IIT KGP	Prof B. Bhattacharya
10	VLSI DESIGN	Elective	Pilot	Dr.Vijay Nath	BIT Mesra	Prof. Shraddha Shivani
11	MICROCONTROLLER AND EMBEDDED SYSTEMS	Elective	Pilot	Prof. Santanu Chattopadhyay	IITKGP	Prof B. Bhattacharya
12	RADAR ENGINEERING	Elective	Pilot	Prof. N V S N Sarma	NIT Warangal	Prof. Somayajulu
3. E	Electrical Engineering					
1	ELECTRICAL MACHINES	Core	Pilot	Dr. Debaprasad Kastha	IIT KGP	Prof B. Bhattacharya
2	CONTROL SYSTEM ENGINEERING	Core	Pilot	Prof. Siddhartha Mukhopadhyay	IIT KGP	Prof B. Bhattacharya
3	POWER SYSTEMS	Core	Pilot	Prof. Avinash Kumar Sinha	IIT KGP	Prof B. Bhattacharya
4	INDUSTRIAL DRIVES AND CONTROL	Elective	Pilot	Prof. K C Jana	BIT Mesra	Prof. Shraddha Shivani
5	HIGH VOLTAGE DIRECT CURRENT TRANSMISSION (HVDC) AND FLEXIBLE ALTERNATING CURRENT TRANSMISSION SYSTEMS (FACTS)	Elective	Pilot	Prof. D V S S Sivasarma	NIT Warangal	Prof. Somayajulu

6	DIGITAL CONTROL	Elective	Pilot	Prof. Kannan Moudgalya	IIT Bombay	Prof B. Bhattacharya
7	INDUSTRIAL APPLICATIONS OF HV ENGG/ HIGH VOLTAGE ENGINEERING	Elective	Pilot	Prof. Saradindu Ghosh	NIT, Durgapur	Prof. N. K. Roy
8	INDUSTRIAL INSTRUMENTATION	Elective	Pilot	Prof. Pranab Kr. Dutta	IIT KGP	Prof B. Bhattacharya
4. Me	echanical Engineering					
1	FLUID MECHANICS	Core	Pilot	Prof. G. L. Asawa	IIT Roorkee	Prof. H. R. Wason
2	THERMODYNAMICS	Core	Pilot	Prof. Souvik Bhattacharyya	IIT KGP	Prof B. Bhattacharya
3	HEAT TRANSFER	Core	Pilot	Prof. Prasanta Kumar Das	IIT KGP	Prof B. Bhattacharya
4	MACHINES TOOLS AND MACHINING	Core	Pilot	Prof. Soumitra Paul	IIT KGP	Prof B. Bhattacharya
5	PRINCIPLES OF INDUSTRIAL ENGINEERING	Core	Pilot	Prof. Apurba Kumar Sharma	IIT Roorkee	Prof. Amita Sinval / Prof. H. R. Wason
6	CAD AND CAM	Elective	Pilot	Prof. C S P Rao	NIT Warangal	Prof. Somayajulu,
7	STRENGTH OF MATERIAL	Elective	Pilot	Prof. Ranjit Karmakar	IIT KGP	Prof B. Bhattacharya
8	MECHATRONICS	Elective	Pilot	Prof. V. Vasu	NIT Warangal	Prof. Somayajulu,
5. Cł	nemical Engineering					
1	FLUID AND PARTICLE MECHANICS	Core	Pilot	Prof. A Venu Vinod	NIT Warangal	Prof. Somayajulu,
2	CHEMICAL ENGINEERING THERMODYNAMICS	Core	Pilot	Prof. Shishir Sinha	IIT Roorkee	Prof. H.R. Wason
3	CH- 306 PROCESS EQUIPMENT DESIGN	Core	Pilot	Prof. Vijay K. Agarwal	IIT Roorkee	Prof. Amita Sinval / Prof. H. R. Wason
4	CH-307 EQUIPMENT DESIGN	Core	Pilot	Prof. C.B. Majumder	IIT Roorkee	Prof. Amita Sinval / Prof. H. R. Wason
5	TRANSPORT PHENOMENA	Core	Pilot	Prof. T Mandal	NIT Durgapur	Prof. N. K. Roy
6	ENVIRONMENTAL ENGINEERING	Core	Pilot	Prof. Shashidharr	NIT Warangal	Prof. Somayajulu,

7	NUMERICAL METHODS FOR CHEMICAL ENGINEERS	Elective	Pilot	Prof. Pallab Ghosh	IIT Guwahati	Dr. J.K. Deka				
8	COLLOID AND INTERFACE SCIENCE	Elective	Pilot	Prof. Pallab Ghosh	IIT Guwahati	Dr. J.K. Deka				
6. Ci	6. Civil Engineering									
1	ENGINEERING HYDROLOGY	Core	Pilot	Prof. N V Umamahesh	NIT Warangal	Prof. Somayajulu				
2	TRANSPORTATION ENGG.	Core	Pilot	Prof. Sudeshna Mitra	IIT KGP	Prof B. Bhattacharya				
3	WATER RESOURCES ENGG	Core	Pilot	Dr. Rajib Maity	IIT KGP	Prof B. Bhattacharya				
4	WATER AND W.W. ENGINEERING	Core	Pilot	Prof. Sudha Goel	IIT KGP	Prof B. Bhattacharya				
5	CONSTRUCTION MATERIALS AND TECHNOLOGY	Core	Pilot	Prof. G. Chitra	IIIT Bangalore	Prof B. Bhattacharya				
6	STRUCTURAL ANALYSIS-II	Elective	Pilot	Prof. K K Singh	IIT Roorkee	Prof. Amita Sinval / Prof. H. R. Wason				
7	FOUNDATION ENGINEERING	Elective	Pilot	Prof. Swami Saran	IIT Roorkee	Prof. Amita Sinval / Prof. H. R. Wason				
8	PRINCIPLES OF SURVEYING	Elective	Pilot	Prof. R D Garg	IIT Roorkee	Prof. Amita Sinval / Prof. H. R. Wason				
9	GEOGRAPHICAL INFORMATION SYSTEM	Elective	Pilot	Prof. P K Garg	IIT Roorkee	Prof. Amita Sinval / Prof. H. R. Wason				
10	GEOMATICS ENGINEERING	Elective	Pilot	Prof. S K Ghosh	IIT Roorkee	Prof. Amita Sinval / Prof. H. R. Wason				
11	HYDRAULICS	Elective	Pilot	Prof. V.R.Desai	IIT KGP	Prof B. Bhattacharya				
12	CONCRETE TECHNOLOGY	Elective	Pilot	Prof. T D Gunneswara	NIT Warangal	Prof. Somayajulu				
7. 1 <sup>st</sup> a	7. 1 <sup>st</sup> and 2 <sup>nd</sup> Semester courses									
1	MECHANICS / ENGINEERING MECHANICS	DEPTH	Pilot	Goutam Chakraborty	IIT KGP	Prof B. Bhattacharya				