

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A), HYDERABAD

Departmental Committees - Constitution and Responsibilities DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING COURSE EXPERT GROUP (CEG)

BE (ECE)

R-20 Curriculum

Objective:

To contribute to the effective implementation of pedagogical approaches and assessment tools identified by PAQIC, DAB and other regulatory bodies.

Composition:

Course experts from the specified set of courses chaired by senior faculty among them.

Meeting Frequency: Min. 3 times in a semester.

Beginning of the semester, after the first Class Test, after external examinations results are published (for results analysis, computation of CO attainment) and also whenever required.

Tenure: Three years

Quorum: 60%

Roles and Responsibilities:

- 1. Defining, Reviewing and Reframing the Course Outcomes based on Blooms Taxonomy for all the specified Courses
- 2. Framing of Course Articulation matrix (CO-PO mapping)
- 3. Computation of CO attainments
- 4. Design of assessment tools suitable for the specified courses, Results analysis and preparing the action plan for improvement of Results
- 5. Conducting Course End Survey, analysis and identify actions to be taken for improving pedagogical approaches
- 6. Identifying Curriculum gaps by observing CO-PO attainment levels of previous batches
- 7. Question paper validation to ensure the desired standard from outcome attainment perspective as well as learning levels perspective
- 8. Setting course wise CO attainment targets before the beginning of the semester
- 9. Maintenance of Course Files
- 10. Preparing Action plans for improvement and corrective measures
- 11. Prepare and submit periodic reports (Before the commencement and at the end of each semester) to the Program Assessment Quality Improvement Committee (PAQIC) about the activities carried out

Deliverables:

Submit Reports to PAQIC on Effectiveness of TLP in terms of:

- 1. Revision of Course Outcomes
- 2. Course Outcome attainment
- 3. Gaps identified, actions taken and their effectiveness
- 4. Setting course wise CO attainment targets
- 5. Suggestions for subsequent Curriculum Revision

I. CEG-1 (Electronics):

S.no	Semester	Course Code	Name of the Course	Course Expert Group Chairman and members
1.	III	20EC C02	Electronic Devices	
2.	III	20EC C05	Electronic Devices Lab	Dr.ASR (Chairman),
3.	IV	20EC C07	Analog Circuits	Dr. PNS, Sri. NJMR, Sri. TAB, Smt.BN
4.	IV	20EC C12	Analog Circuits Lab	Sri. PCS, Sri ECS, Smt. DND and Smt.
5.	V	20EC C18	Linear and Digital ICs	GC
6.	V	20EC C21	Linear and Digital ICs Lab	

II. CEG - 2 (RF& Microwaves):

S.no	Semester	Course Code	Name of the Course	Course Expert Group Chairman and members
1.	III	20EC C01	Electromagnetic Theory and	
			Transmission Lines	
2.	IV	20EC C09	Antennas and Wave Propagation	
3.	V	20EC E05	Software Defined Radio	D. MUHAD (Cl:)
4.	V	20EC E11	Drones and Applications	Dr.NVKR (Chairman) Dr ADS, Dr.PNS, Dr ASR,
5.	V	20EC E23	Smart Antennas	Dr VKM, Dr. MLNC, Smt KSRSJ,
6.	VI	20EC C28	Microwave and Radar Engineering	Dr. KS, Sri TS and Dr JG
7.	VI	20EC C31	Microwave Engineering Lab	D1. K3, 311 13 and D1 Ju
8.	VI	20EC E29	Principles of GNSS	
9.	VI	20EC E35	Remote Sensing and GIS	
10.	VI	20EC E17	Green Communication	

III. CEG -3 (NW, Instrumentation and Controls):

S.no	Semester	Course Code	Name of the Course	Course Expert Group Chairman and members
1.	III	20EC C03	Network Theory	Dr KSR (Chairman)
2.	III	20EC C06	Electronic Workshop and Networks Lab	Dr VKM, Sri MVNB, Dr.MRR,
3.	IV	20EC C10	Control Systems	Sri TS, Dr KSK,
4.	V	20EC E10	Sensors and Actuators	and Smt. JM

IV. CEG -4 (Signal Processing):

S.no	Semester	Course Code	Name of the Course	Course Expert Group Chairman and members
1.	III	20EC C04	Signals and Systems	
2.	V	20EC C17	Digital Signal Processing	Dr DKR (Chairman),
3.	V	20EC C20	Digital Signal Processing Lab	Dr PNS, Dr. KSR, Sri MVNB,
4.	V	20EC E03	Signal Detection Techniques	Smt NDL,Sri TAB,
5.	V	20EC E09	Biomedical Signal processing	Sri PCS, Sri GVPK, , Smt DND, Sri
6.	VI	20EC E15	Multirate and Wavelet Signal Processing	PR, Dr CHNV,
7.	VI	20EC E21	Image and Video Processing	Smt JM, ,Smt MVS Dr SPS and Sri
8.	VI	20EC E27	DSP Processors and Architectures	MRKN
9.	VII	20EC E33	Speech Processing	

V. CEG - 5 (Communications):

S.no	Semester	Course Code	Name of the Course	Course Expert Group Chairman and members
1.	IV	20EC C08	Analog Communication	
2.	IV	20EC C13	Analog Communication Lab	Co.: MUNID (Ch. airman)
3.	V	20EC C16	Digital Communication	Sri MVNB (Chairman) Dr DKR, Dr ADS, Dr ASR,
4.	V	20EC C19	Digital Communication Lab	- Dr AV, Dr VKM , Smt KSRSJ ,
5.	V	20EC E02	Optical Communication	- Dr KS, Smt BN and Dr.ChNV
6.	V	20EC E08	Mobile Cellular Communication	Di KS, Silit biv and Di.Gilivy
7.	VI	20EC E14	Coding Theory and Techniques	
8.	VI	20EC E20	Satellite Communication	
9.	VI	20EC E26	5G Communications	

VI. CEG - 6 (VLSI):

S.no	Semester	Course Code	Name of the Course	Course Expert Group Chairman and members
1.	IV	20EC C11	Digital Systems Design	
2.	IV	20EC C14	Digital Systems Design Lab	
3.	V	20EC E01	CAD for VLSI Verification	Dr MLNC (Chairman)
4.	V	20EC E07	CMOS Analog IC Design	Dr KSR, Dr MRR, Sri AKK, Sri NJMR,
5.	VI	20EC E13	CPLD and FPGA Architectures	Sri. PCS, Sri MZJ, Sri. ECS, Smt. GC,
6.	VI	20EC E19	Design for Testability	Ms BD and Smt. KN
7.	VI	20EC C23	VLSI Design	
8.	VI	20EC C24	Electronic Design and Automation Lab	
9.	VI	20EC E25	CMOS Data Converters	
10.	VII	20EC E31	VLSI Technology	

VII. CEG – 7 (Embedded Systems):

S.no	Semester	Course Code	Name of the Course	Course Expert Group Chairman and members
1.	V	20EC C15	Computer Architecture and	
1.	•	2020 010	Microprocessors	
2.	V	20EC E04	Embedded C Programming	
3.	VI	20EC E16	Real Time Operating Systems	Dr. PS (Chairman)
4.	VI	20EC E28	Advanced Microprocessors and Applications	Dr KSR, Sri NJMR, Smt NDL, Sri GMR, Sri MdZJ, Smt JM, Smt GC
5.	VI	20EC C22	Microcontrollers	and Smt DS
6.	VI	20EC C25	Microcontrollers Lab	
7.	VI	20EC E22	Embedded Systems	
8.	VII	20EC E34	IoT and Its Applications	
9.	VII	20EC C30	IoT and Simulation Lab	

VIII. CEG – 8 (Computer Networks):

S.no	Semester	Course Code	Name of the Course	Course Expert Group Chairman and members
1.	VII	20EC C27	Computer Networks	Dr AV (Chairman),
2.	VII	20EC C29	Computer Networks Lab	Sri GVPK, Dr KSK and Dr MRKN
3.	VII	20EC E36	Network Security	311 GVI K, DI KSK allu DI MKKIV
4.	VIII	20EC E32	Mobile Adhoc and Sensor Networks	

IX. CEG - 9 (Seminars, Project and Internships):

S.no	Semester	Course Code	Name of the Course	Course Expert Group Chairman and members
1.	III	20EC I01	MOOCs/Training/Internship	
2.	V	20EC I02	Industrial/Rural Internship	Dr PNS(Chairman), Dr NVKR, Dr ADS, Dr AV, Dr VKM, Dr MLNC, Dr KSR, Smt AS, Dr. KS ,Sri GMR, Sri ECS and Dr KSK
3.	VI	20EC C26	Mini Project	
4.	VII	20EC I03	Industrial Internship	
5.	VII	20EC C32	Project Part-1	
4.	VIII	20EC C33	Technical Seminar	
5.	VIII	20EC C37	Project Part-2	

X CEG - 10 (Software Related Courses):

S.no	Semester	Course Code	Name of the Course	Course Expert Group Chairman and members
1	III	20CS C06	Basics of Data Structures	
2	III	20CS C07	Basics of Data Structures Lab	
3	V	20ECE06	Principles and Applications of AI	Sri PR (Chairman),
4	V	20ECE12	Fundamentals of Cloud Computing	Dr PNS, Dr KS, Sri GVPK,
5	VI	20EC E30	Pattern Recognition and Machine Learning	Dr MBC, Dr.JG, Dr SPS, Sri AM, Smt. GC, Ms BD and Smt. KN
6	VI	20ECE18	Cryptography and Blockchain Technology	
7	VI	20ECE24	Data Analytics for Signal Processing	

Overall Coordinators of CEG groups: Sri. M.V. Nagabhushanam and Smt. K.S.R.S. Jyothsna

Date: 22.08.2022 Head & BoS ECE Dept.