



BMS INSTITUTE OF TECHNOLOGY & MANAGEMENT

(Autonomous Institution Affiliated to VTU, Belagavi)

B. E. in Electronics and Communication Engineering

Scheme of Teaching and Examinations - 2022 Scheme

Outcome-Based Education (OBE) and Choice Based Credit System (CBCS)

VIII Semester

Sl. No.	Course Category	Course Code	Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Credits Distribution					Examination				Contact Hours/week
					L	T	P	S	Total	CIE Marks	SEE Marks	Total Marks	SEE Duration (H)	
1	PEC	BEC801X	Professional Elective Course IV (Online courses)	TD: ECE PSB: ECE	0	0	0	3	3	25	75	100	3	-
2	OEC	BEC802X	Open Elective Course III (Online courses)		0	0	0	3	3	25	75	100	3	-
3	INT	BEC803	Industry Internship / Research Internship	-	0	0	10	0	10	100	100	200	3	20
TOTAL					0	0	10	6	16	150	250	6	-	20

Professional Elective Course IV (Online courses)

Course Code	NPTEL Course Code	Course Name	NPTEL Course Link
BEC801A	noc26-ee04	Basic Overview of Semiconductor Device Processing and IC Fabrication	https://onlinecourses.nptel.ac.in/noc26_ee04/preview
BEC801B	noc26-ee07	Memory Device Technology for AI/ML Computing	https://onlinecourses.nptel.ac.in/noc26_ee07/preview
BEC801C	noc26-ee09	FPGA Based Signal Processing Systems	https://onlinecourses.nptel.ac.in/noc26_ee09/preview
BEC801D	noc26-ee10	Photonic Integrated Circuit	https://onlinecourses.nptel.ac.in/noc26_ee10/preview
BEC801E	noc26-ee20	Network Security	https://onlinecourses.nptel.ac.in/noc26_ee20/preview
BEC801F	noc26-ee21	Digital Communication using GNU Radio	https://onlinecourses.nptel.ac.in/noc26_ee21/preview
BEC801G	noc26-ee25	Principles of Digital Communication	https://onlinecourses.nptel.ac.in/noc26_ee25/preview
BEC801H	noc26-ee45	Digital VLSI Testing	https://onlinecourses.nptel.ac.in/noc26_ee45/preview

BEC801I	noc26-ee52	Biomedical Signal Processing	https://onlinecourses.nptel.ac.in/noc26_ee52/preview
BEC801J	noc26-ee60	Spread Spectrum Communications and Jamming	https://onlinecourses.nptel.ac.in/noc26_ee60/preview
BEC801K	noc26-ee70	Digital IC Design	https://onlinecourses.nptel.ac.in/noc26_ee70/preview
BEC801L	noc26-ee71	Digital System Design	https://onlinecourses.nptel.ac.in/noc26_ee71/preview
BEC801M	noc26-ee77	Optical Wireless Communications for Beyond 5G Networks and IoT	https://onlinecourses.nptel.ac.in/noc26_ee77/preview
BEC801N	noc26-ee90	VLSI Physical Design with Timing Analysis	https://onlinecourses.nptel.ac.in/noc26_ee90/preview
BEC801O	noc26-ee91	RF Transceiver Design	https://onlinecourses.nptel.ac.in/noc26_ee91/preview
Open Elective Course III (Online courses)			
BEC802A	noc26-hs116	Online Communication in the Digital Age	https://onlinecourses.nptel.ac.in/noc26_hs116/preview
BEC802B	noc26-hs81	Globalization: Theoretical Perspectives	https://onlinecourses.nptel.ac.in/noc26_hs81/preview
BEC802C	noc26-mg12	Supply Chain Digitization	https://onlinecourses.nptel.ac.in/noc26_mg12/preview
BEC802D	noc26-mg60	Talent Acquisition and Management	https://onlinecourses.nptel.ac.in/noc26_mg60/preview
BEC802E	noc26-mg61	Leadership and Team Effectiveness	https://onlinecourses.nptel.ac.in/noc26_mg61/preview
BEC802F	noc26-hs43	Introduction to Japanese Language and Culture	https://onlinecourses.nptel.ac.in/noc26_hs43/preview
BEC802G	noc26-mg41	E-Business	https://onlinecourses.nptel.ac.in/noc26_mg41/preview
BEC802H	noc26-ec10	Health Economics	https://onlinecourses.nptel.ac.in/noc26_ec10/preview
BEC802I	noc26-mg38	Safety and Risk Analytics	https://onlinecourses.nptel.ac.in/noc26_mg38/preview
BEC802J	noc26-mg11	Business Fundamentals for Entrepreneurs	https://onlinecourses.nptel.ac.in/noc26_mg11/preview
BEC802K	noc26-cs66	Deep Learning - IIT Ropar	https://onlinecourses.nptel.ac.in/noc26_cs66/preview
BEC802L	noc26-cs69	Getting Started with Competitive Programming	https://onlinecourses.nptel.ac.in/noc26_cs69/preview
BEC802M	noc26-hs78	German - I	https://onlinecourses.nptel.ac.in/noc26_hs78/preview

BEC802N	noc26-cs63	Artificial Intelligence: Knowledge Representation and Reasoning	https://onlinecourses.nptel.ac.in/noc26_cs63/preview
BEC802O	noc26-hs58	Education for Sustainable Development	https://onlinecourses.nptel.ac.in/noc26_hs58/preview
BEC802P	noc26-ch40	Environmental Quality Monitoring & Analysis	https://onlinecourses.nptel.ac.in/noc26_ch40/preview
BEC802Q	noc26-cs74	Introduction to Machine Learning	https://onlinecourses.nptel.ac.in/noc26_cs74/preview
BEC802R	noc26-cs34	Blockchain and its Applications	https://onlinecourses.nptel.ac.in/noc26_cs34/preview
BEC802S	noc26-ce74	Air pollution and Control	https://onlinecourses.nptel.ac.in/noc26_ce74/preview
BEC802T	noc26-ag09	Water Quality Management Practices	https://onlinecourses.nptel.ac.in/noc26_ag09/preview

Note: Open Elective Online Courses refer to the attached document below

Professional Elective / Open Elective Online Courses: These are ONLINE courses suggested by the respective Board of Studies. Details of these courses shall be made available for students during the VI semester only. Students are required to choose only the courses which are suggested by the respective BoS. Duration of the online course should be of a minimum of 12 weeks. Students can able to complete the specified online courses with a qualifying certificate issued by the competent authority. The online courses can be registered and completed from the VI semester onwards and the credits will be considered during the VIII semester only. The courses are to be chosen from the SWAYAM – NPTEL platform only. The credits earned for these courses will not be considered for claiming the credits under the Honors Degree Programme.

Industry Internship / Research Internship: The mandatory Industry / Research internship is for 14 to 20 weeks. The internship shall be considered as a head of passing and shall be considered for the award of a degree. Those who do not take up/complete the internship shall be declared to fail and shall have to complete it during the subsequent examination after satisfying the internship requirements.

Research internship: A research internship is intended to offer the flavour of current research going on in the research field. It helps students get familiarized with the field and imparts the skill required for carrying out research.

Industry internship: Is an extended period of work experience undertaken by students to supplement their degree for professional development. It also helps them learn to overcome unexpected obstacles and successfully navigate organizations, perspectives, and cultures. Dealing with contingencies helps students recognize, appreciate, and adapt to organizational realities by tempering their knowledge with practical constraints.

NOTE: NPTEL Courses offered for the Academic Year 2025-2026 EVEN semester (Jan -April 2026) NPTEL TERM for 2022 scheme students