

Bharath Institute of Higher Education and Research

B.Tech-Electronics & Communication Engineering-Prerequisites & Co requisites Table

Sub Code	Subject Title	Category of course (H/B/E/P/OE /NE/CE/PR)	Prerequisite courses	Co requisites courses
BEN101	English-I	H	+2 level English	NIL
BMA101	Mathematics-I	B	+ 2 level Mathematics	NIL
BPH101	Engineering Physics-I	B	+2 level Physics	NIL
BCH101	Engineering Chemistry-I	B	+2 level Chemistry	NIL
BCS101	Fundamentals Of Computing And Programming	E	NIL	NIL
BJP101	Japanese	H	+2 level English	NIL
BKR101	Korean	H	+2 level English	NIL
BCN101	Chinese	H	+2 level English	NIL
BFR101	French	H	+2 level English	NIL
BGM101	German	H	+2 level English	NIL

BME102	Engineering Graphics	E	+2 maths , +2 physics	BMA101-Mathematics I
BEE101	Basic Electrical And Electronics Engineering	E	+2 Physics, +2 Maths	BPH101-Engineering physics I
BCS1L1	Computer Practice Laboratory	E	NIL	BCS101-Fundamental of computing and programming
BEE1L1	Basic Electrical And Electronic Engineering Practices Laboratory	E	+2 Level Physics	BEE101-Basic Electrical and Electronics Engineering
BEN201	English–II	H	BEN101-English I	NIL
BMA201	Mathematics–II	B	BMA101-Mathematics I	NIL
BPH201	Engineering Physics–II	B	BPH101-Engineering Physics –I	NIL
BCH201	Engineering Chemistry–II	B	BCH101-Engineering Chemistry –I	NIL
BCS201	Internet Programming	E	BCS101-Fundamentals of Computing and Programming	NIL
BSS201	Personality Development	H	NIL	NIL
BBT202	Biology for Engineers	B	+2 Basic science	NIL
BME203	Basic Mechanical Engineering	E	+2 Maths & Physical Science	NIL
BCE201	Basic Civil Engineering	E	+2 Mathematics & Physical Science	NIL
BCS2L1	Internet Practices Laboratory	E	BCS101-Fundamentals of Computing and Programming, BCS1L1-Computer practice laboratory	BCS201-Internet Programming
BCM2L1	Basic Civil & Mechanical Engineering Practices Lab	E	Nil	BCE201-Basic Civil Engineering and BME203-Basic Mechanical Engineering

BPC2L1	Physics and Chemistry Laboratory	B	BPC1L1-Engineering Physics and Chemistry Lab	BPH201-Engineering Physics- II and BCH201-Engineering Chemistry -II
BMA301	Mathematics–III	B	BMA101-Mathematics -I & BMA201-Mathematics II	NIL
BEE305	Electrical Machines	P	BEE101-Basic Electrical and Electronics Engineering	NIL
BEC301	Signals and Systems	P	BMA201-Mathematics-II	BMA301-Mathematics-III
BEC302	Principles of Digital Electronics	P	BEE101-Basic Electrical & Electronics Engineering	NIL
BEE301	Circuit Theory	P	BEE101-Basic Electrical and Electronics Engineering	NIL
BCE306	Environmental Studies	H	BCH101-Engineering Chemistry – I BCH201-Engineering Chemistry II	NIL
BEE3L3	Electrical Engineering Lab	P	BEE1L1-Basic Electrical & Electronics Engineering practices Lab	BEE305-Electrical Machines
BEC3L1	Electronic Devices and Circuits Lab	P	BEE1L1-Basic Electrical & Electronics Engineering Practices Lab	Nil
BEC3L2	Digital Electronics Lab	P	BEE1L1-Basic Electrical & Electronics Engineering practices Lab	BEC302-Principle of Digital Electronics
BMA402	Numerical Methods	B	BMA101-Mathematics – I BMA201- Mathematics II BMA301- Mathematics III	Nil
BEC402	Electronic Circuits	P	BEE301-Circuit theory & BEE101-Basic Electrical & Electronics Engineering.	NIL
BEC405	Linear Integrated Circuits	P	BEC302-Principle of Digital electronics	BEC402-Electronic Circuits

BCS406	Objected Oriented Programming And Data Structures	P	BCS101-Fundamentals of Computing and Programming	Nil
BEC403	Electromagnetic Fields And Waves	P	BMA301-Engineering Mathematics -III	Nil
BEI406	Electronic Instrumentation	P	BEE101-Basic Electrical & Electronics Engineering	BEC405-Linear Integrated Circuits
BEC4L1	Electronic Circuit Design Lab	P	BEC3L1-Electronics Devices and circuits Lab	BEC402-Electronic Circuits
BEC4L2	Linear Integrated Circuits Lab	P	BEE1L1-Basic Electrical & Electronics Engineering practices lab	BEC405-Linear Integrated circuits
BCS4L3	Object Oriented Programming And Data Structures Lab	P	BCS1L1-Computer Practice Lab	BCS406-Object Oriented Programming and Data Structures
BEC505	Digital Signal Processing	P	BEC301-Signals and Systems	Nil
BEC502	Microprocessor And Microcontroller	P	BEC302-Principles of Digital Electronics	Nil
BEC504	Communication Engineering–I	P	BEC301-Signals and Systems	NIL
BMA504	Random Process	B	BMA201-Mathematics II	NIL
BEC5L1	Digital Signal Processing Laboratory	P	BCS4L3-Object Oriented Programming & data Structures Lab	BEC505-Digital Signal Processing
BEC5L6	Microprocessor And Microcontroller Lab	P	BEC3L2-Digital Electronics Lab	BEC502-Microprocessor and Microcontroller
BEC5L3	Communication Engineering Laboratory-I	P	Nil	BEC504-COMMUNICATION ENGINEERING - I
BEC601	Computer Communication And Networks	P	BEC504-Communication Engineering-I	BEC604-Communication Engineering-II
BEC604	Communication Engineering–II	P	BEC504-Communication Engineering-I	Nil

BEI601	Control Systems	P	BEC301-Signals & Systems , BEI406-Electronic Instrumentation	Nil
BSS601	Value Education And Professional Ethics	H	NIL	NIL
BEC6L1	Computer Communication & Networks Lab	P	BEC5L3-Communication Engineering - I Lab	BEC601-Computer Communication and networks
BEC6L2	Electronics System Design Lab	P	BEC402-Electronics Circuits and BEC5L3-Communication engineering I Lab	BEI601-Control system
BEC6L3	Communication Engineering–II Lab	P	BEC5L3-Communication engineering-I Lab	BEC604-Communication Engineering-II
BEC701	Fiber Optic Communication	P	BEC503-Transmission lines networks and wave guides	Nil
BEC702	Digital CMOS VLSI	P	BEC302-Principles of Digital Electronics	Nil
BEC703	Microwave Engineering	P	BEC503-Transmission lines networks and wave guides	BEC701-Fiber optic communication
BEC704	Antennas And Wave Propagation	P	BEC503-Transmission lines networks and wave guides	Nil
BEC7L1	Digital CMOS VLSI Lab	P	BEC3L2-Digital Electronics Lab	BEC702-Digital CMOS VLSI
BEC7L2	Optical Communication Lab	P	BEC5L3-Communication Engineering I (Lab) BEC6L3-Communication Engineering II (Lab)	BEC701-Fiber optic communication
BEC7L3	Microwave Engineering Lab	P	BEC503-Transmission Lines Networks & Wave guides	BEC703-Microwave Engineering
BEC 503	Transmission Lines, Networks and Waveguides	CE	BEC403-Electromagnetic Fields and waves.	Nil
BEC010	VLSI Design	CE	BEC402-Electronic Circuits BEC302-Principles of Digital Electronics	Nil

BEC001	Advanced Computer Architecture	CE	BEC302-Principles of digital electronics	BEC502-Microprocessor & Microcontroller
BEC008	MEMS and NEMS	CE	BPH101-Engineering Physics- I, BPH201-Engineering Physics- II, BCH101- Engineering Chemistry - I , BCH201- Engineering Chemistry - II	NIL
BEC007	Digital Image Processing	CE	BEC505-Digital Signal Processing	Nil
BEC015	ASIC Design	CE	BEC302-Principles of Digital Electronics	Nil
BEC002	Wireless Networks	CE	BEC504- Communication Engineering-I, BMA504- Random process	BEC601- Computer Communication and networks
BEC012	Cryptography and Network Security	CE	BEC504-Communication Engineering - I	BEC601-Computer Communication and Networks
BEC016	Cognitive Radio	CE	BEC601- Computer Communication and Networks	NIL
BEC005	Blue Tooth Technology	CE	BEC002-Wireless Networks, BEC601- Computer Communication and Networks	NIL
BEC705	Cellular Mobile Communication	CE	BEC002- Wireless Networks, BEC601-Computer Communication and Networks	NIL
BEC003	Satellite Communication	CE	BEC504- Communication Engineering I BEC604- Communication Engineering II	NIL
BCS 002	Neural Networks	NE	BMA101- Mathematics-I, BMA201-Mathematics-II, BMA402- Numerical Methods	NIL
BBM054	Bio Informatics	NE	BBT202- Biology for Engineers	NIL
BEI605	Embedded Systems Design	NE	BEC001- Advanced Computer Architecture BEC502-Microprocessor and Microcontroller	NIL

BCS702	Mobile and Pervasive Computing	NE	BEC504- Communication Engineering I	BEC002-Wireless networks
BCS 701	Grid And Cloud Computing	NE	BEC601- Computer Communication and Networks, BEC002- Wireless Networks	NIL
BCS603	Artificial Intelligence& Expert System	NE	BCS002-Neural Networks	NIL
BCS 008	Distributed Operating Systems	NE	BEC001- Advanced Computer Architecture	NIL
BBM 405	Biosensors and Transducer	NE	BBT202- Biology for Engineers, BEI406- Electronic Instrumentation	NIL
BEI 704	Virtual Instrumentation	NE	BEI406- Electronic Instrumentation	NIL
BET 603	Telecommunication Switching Systems	NE	BEC601- Computer Communication and Networks, BEC002-Wireless networks	NIL
BBA008	Total Quality Management	OE	Professional courses	NIL
BBA001	Principles of Management and Organizational Behavior	OE	Professional courses	NIL
BBA 004	Engineering Economics and Financial Management	OE	Professional courses	NIL
BEI701	Logic and Distributed Control System	OE	BEI601-Control Systems	NIL
BEI012	Analog Integrated Circuit Design	OE	BEC405-Linear Integrated Circuits	NIL
BET008	Integrated Service Digital Network	OE	BEC601- Computer Communication and Networks	NIL