

SEMESTER WISE UNITS FOR B.E IN ELECTRONICS AND INSTRUMENTATION ENGINEERING

Year 1 (Common to all Engineering Discipline)							
SEMESTER 1				SEMESTER 2			
Unit Code	Unit Name	Exam	CP	Unit Code	Unit Name	Exam	CP
LNG501	English for Academic Studies	Y	12	BEN506	Introduction to Electrical and Electronics Engineering	Y	12
BEN502	Engineering Computation 1	Y	12	BEN507	Introduction to Computer Programming	Y	12
BEN503	Engineering Physics	Y	12	BEN508	Engineering Mechanics	Y	12
BEN504	Engineering Graphics	Y	12	BEN509	Workshop Practice	N	12
BEN505	Material Science	Y	12	BEN601	Engineering Computation 2	Y	12
Total CP			60	Total CP			60
Year 2(only common to SEEE Bachelor program)							
SEMESTER1				SEMESTER 2			
Unit Code	Unit Name	Exam	CP	Unit Code	Unit Name	Exam	CP
EEE601	Engineering Planning	Y	12	EEE600	Design Project	N	12
EEE627	Logic Design	Y	12	EEE610	Electrical Engineering Modeling	Y	12
EEE662	Engineering Software	Y	12	EEE618	Mechatronics	Y	12
EEE681	Electro-Technology	Y	12	EEE661	Introduction to C++ Programming	Y	12
EEE694	Engineering Mathematics 3	Y	12	EEE695	Engineering Mathematics 4	Y	12
Total CP			60	Total CP			60
Year 3							
SEMESTER 1				SEMESTER 2			
Unit Code	Unit Name	Exam	CP	Unit Code	Unit Name	Exam	CP
EEE701	Fields & Waves	Y	12	EEE706	Engineering and Society	Y	9
EEE743	Control Systems Engineering	Y	12	EEE707	Project or Internship in the industry	N	42
EEE713	Principles of Measurement and Instrumentation	Y	12	EEE714	Industrial Measurement and Instrumentation 1	Y	9
EEE723	Industrial Electronics	Y	12				
EEE761	Programmable Logic Controllers and SCADA System	Y	12				
Total CP			60	Total CP			60
Year 4							
SEMESTER 1				SEMESTER 2			
Unit Code	Unit Name	Exam	CP	Unit Code	Unit Name	Exam	CP
EEE785	Project 1	N	24	EEE786	Project 2	N	24
EEE787	Fundamentals of Digital Signal Processing	Y	12	EEE790	Innovation Management and New Product Development	N	18
EEE796	VHDL and Logic Synthesis	Y	12	EEE797	Microprocessor System and Embedded	Y	18

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EEE798	Industrial Measurement and Instrumentation 2	Y	12	System		
Total CP			60	Total CP		60

3.1 UNIT DETAILS AND PRE-REQUISITE

Unit No.	Unit Code	Name of the unit	Level	Pre-requisite (Pass is required in the following units)	Class Room Contact Hours	Self-directed Learning Hours	Credits
1	LNG501	English for Academic Studies	5	Form 7	84	96	12
2	BEN502	Engineering Computation 1	5	Form 7	84	96	12
3	BEN503	Engineering Physics	5	Form 7	84	96	12
4	BEN504	Engineering Graphics	5	Form 7	84	96	12
5	BEN505	Materials Science	5	Form 7	84	96	12
6	BEN506	Introduction to Electrical and Electronics Engineering	5	BEN503	84	96	12
7	BEN507	Introduction to Computer Programming	5	BEN502	84	96	12
8	BEN508	Engineering Mechanics	5	BEN503	84	96	12
9	BEN509	Workshop Practice	5	BEN505	84	96	12
10	BEN601	Engineering Computation 2	6	BEN502	84	96	12
11	EEE601	Engineering Planning	6	BEN601	84	96	12
12	EEE627	Logic Design	6	BEN506	84	96	12
13	EEE662	Engineering Software	6	BEN507	84	96	12
14	EEE681	Electro-Technology	6	BEN506	84	96	12
15	EEE694	Engineering Mathematics 3	6	BEN601	84	96	12
16	EEE600	Design Project	6	BEN509	84	96	12
17	EEE610	Electrical Engineering Modeling	6	BEN601, EEE681	84	96	12
18	EEE618	Mechatronics	6	BEN508, EEE681	84	96	12
19	EEE661	Introduction to C++ Programming	6	BEN507	84	96	12
20	EEE695	Engineering Mathematics 4	6	EEE694	84	96	12
21	EEE701	Fields & Waves	7	BEN506, EEE681	84	96	12
22	EEE743	Control Systems Engineering	7	EEE694, EEE610	84	96	12
23	EEE713	Principles of Measurement & Instrumentation 1	7	EEE618, EEE695	84	96	12
24	EEE723	Industrial Electronics	7	BEN506, EEE681	84	96	12
25	EEE761	Programmable Logic Controllers and SCADA System	7	BEN506, EEE627	84	96	12
26	EEE706	Engineering and Society	7	EEE601	56	79	9
27	EEE707	Project or Internship in Industry	7	BEN509, EEE600	84	546	42
28	EEE714	Industrial Instrumentation	7	EEE713	56	79	9
29	EEE785	Project 1	7	EEE707	84	276	24
30	EEE787	Fundamentals of Digital Signal Processing	7	EEE701	84	96	12
31	EEE796	VHDL and Logic Synthesis	7	EEE761, EEE627	84	96	12
32	EEE798	Industrial Measurement & Instrumentation 2	7	EEE743, EEE713	84	96	12
33	EEE786	Project 2	7	EEE785	84	276	24
34	EEE790	Innovation Management and New Product Development	7	EEE707	84	180	18
35	EEE797	Microprocessor System & Embedded System	7	EEE761, EEE627	84	180	18

3.2 DELIVERY MODES

3.2.1 Normal Full Time Attendance

For full time students, the normal pattern of attendance allows the programme to be completed over eight (8) semesters. Students may obtain extra work experience between the semesters.

The normal unit allocation for each semester and the order of delivery will be as follows:-

YEAR-1

SEMESTER 1

UNIT CODE	UNIT NAME	CREDIT POINT
LNG501	ENGLISH FOR ACADEMIC STUDIES	12 credits
BEN502	ENGINEERING COMPUTATION 1	12 credits
BEN503	ENGINEERING PHYSICS	12 credits
BEN504	ENGINEERING GRAPHICS	12 credits
BEN505	MATERIAL SCIENCE	12 credits
		60 Credits

SEMESTER 2

UNIT CODE	UNIT NAME	CREDIT POINT
BEN506	INTRODUCTION ELECTRICAL AND ELECTRONIC ENGINEERING	12 credits
BEN507	INTRODUCTION TO COMPUTER PROGRAMMING	12 credits
BEN508	ENGINEERING MECHANICS	12 credits
BEN509	WORKSHOP PRACTICE	12 credits
BEN601	ENGINEERING COMPUTATION 2	12 credits
		60 Credits

YEAR 2

SEMESTER 1

UNIT CODE	UNIT NAME	CREDIT POINT
EEE601	ENGINEERING PLANNING	12 credits
EEE627	LOGIC DESIGN	12 credits
EEE662	ENGINEERING SOFTWARE	12 credits
EEE681	ELECTRO- TECHNOLOGY	12 credits
EEE694	ENGINEERING MATHEMATIC 3	12 credits
		60 Credits

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SEMESTER 2

UNIT CODE	UNIT NAME	CREDIT POINT
EEE600	DESIGN PROJECT	12 credits
EEE610	ELECTRICAL ENGINEERING MODELING	12 credits
EEE618	MECHATRONICS	12 credits
EEE661	INTRODUCTION To C++ PROGRAMMING	12 credits
EEE695	ENGINEERING MATHEMATIC 4	12 credits
		60 Credits

YEAR 3

SEMESTER 1

UNIT CODE	UNIT NAME	CREDIT POINT
EEE701	FIELDS AND WAVES	12 credits
EEE713	PRINCIPLES OF MEASUREMENT AND INSTRUMENTATION	12 credits
EEE723	INDUSTRIAL ELECTRONICS	12 credits
EEE743	CONTROL SYSTEM ENGINEERING	12 credits
EEE761	PLC AND SCADA SYSTEMS	12 credits
		60 Credits

SEMESTER 2

UNIT CODE	UNIT NAME	CREDIT POINT
EEE706	ENGINEERING AND SOCIETY	9 credits
EEE707	PROJECT OR INTERNSHIP IN THE INDUSTRY	42 credits
EEE714	INDUSTRIAL MEASUREMENT AND INSTRUMENTATION 1	9 credits
		60 Credits

YEAR 4

SEMESTER 1

UNIT CODE	UNIT NAME	CREDIT POINT
EEE785	PROJECT 1	24 credits
EEE787	FUNDAMENTALS OF DIGITAL SIGNAL PROCESSING	12 credits
EEE796	VHDL and LOGIC SYNTHESIS	12 credits
EEE798	INDUSTRIAL MEASUREMENT AND INSTRUMENTATION 2	12 credits
		60 Credits

SEMESTER 2

UNIT CODE	UNIT NAME	CREDIT POINT
EEE786	PROJECT 2	24 credits
EEE790	INNOVATION MANAGEMENT AND NEW PRODUCT DEVELOPMENT	18 credits
EEE797	MICROPROCESSOR SYSTEM AND EMBEDDED SYSTEM	18 credits
		60 Credits