

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech. in COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING)

II YEAR COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2020-21 Admitted Batch

II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CS310PC	Discrete Mathematics	3	0	0	3
2	CS302PC	Data Structures	3	1	0	4
3	MA313BS	Mathematical and Statistical Foundations	3	0	0	3
4	CS304PC	Computer Organization and Architecture	3	0	0	3
5	CS311PC	Python Programming	2	0	0	2
6	SM306MS	Business Economics & Financial Analysis	3	0	0	3
7	CS307PC	Data Structures Lab	0	0	3	1.5
8	CS312PC	Python Programming Lab	0	0	3	1.5
9	*MC309	Gender Sensitization Lab	0	0	2	0
		Total Credits	17	1	8	21

II YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CS416PC	Formal Language and Automata Theory	3	0	0	3
2	CS417PC	Software Engineering	3	0	0	3
3	CS403PC	Operating Systems	3	0	0	3
4	CS404PC	Database Management Systems	3	1	0	4
5	CS412PC	Object Oriented Programming using Java	3	1	0	4
6	CS406PC	Operating Systems Lab	0	0	3	1.5
7	CS407PC	Database Management Systems Lab	0	0	3	1.5
8	CS408PC	Java Programming Lab	0	0	2	1
9	*MC409	Constitution of India	3	0	0	0
		Total Credits	18	2	8	21

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 627.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech. in CIVIL ENGINEERING
COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2018-19 Admitted Batch

I YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	MA101BS	Mathematics - I	3	1	0	4
2	PH102BS	Engineering Physics	3	1	0	4
3	CS103ES	Programming for Problem Solving	3	1	0	4
4	ME104ES	Engineering Graphics	1	0	4	3
5	PH105BS	Engineering Physics Lab	0	0	3	1.5
6	CS106ES	Programming for Problem Solving Lab	0	0	3	1.5
7	*MC109ES	Environmental Science	3	0	0	0
		Induction Programme				
		Total Credits	13	3	10	18

I YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	MA201BS	Mathematics - II	3	1	0	4
2	CH202BS	Chemistry	3	1	0	4
3	ME203ES	Engineering Mechanics	3	1	0	4
4	ME205ES	Engineering Workshop	1	0	3	2.5
5	EN205HS	English	2	0	0	2
6	CH206BS	Engineering Chemistry Lab	0	0	3	1.5
7	EN207HS	English Language and Communication Skills Lab	0	0	2	1
		Total Credits	12	3	8	19.0

II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CE301PC	Surveying and Geomatics	3	0	0	3
2	CE302PC	Engineering Geology	2	0	0	2
3	CE303PC	Strength of Materials - I	3	1	0	4
4	MA304BS	Probability and Statistics	3	1	0	4
5	CE305PC	Fluid Mechanics	3	1	0	4
6	CE306PC	Surveying Lab	0	0	3	1.5
7	CE307PC	Strength of Materials Lab	0	0	3	1.5
8	CE308PC	Engineering Geology Lab	0	0	2	1
9	*MC309	Constitution of India	3	0	0	0
		Total Credits	17	3	8	21

II YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	EE401ES	Basic Electrical and Electronics Engineering	3	0	0	3

2	CE402ES	Basic Mechanical Engineering for Civil Engineers	2	0	0	2
3	CE403PC	Building Materials, Construction and Planning	3	0	0	3
4	CE404PC	Strength of Materials - II	3	0	0	3
5	CE405PC	Hydraulics and Hydraulic Machinery	3	0	0	3
6	CE406PC	Structural Analysis - I	3	0	0	3
7	CE407PC	Computer aided Civil Engineering Drawing	0	0	3	1.5
8	CE409PC	Hydraulics and Hydraulic Machinery Lab	0	0	3	1.5
9	EE409ES	Basic Electrical and Electronics Engineering Lab	0	0	2	1
10	*MC409	Gender Sensitization Lab	0	0	2	0
Total Credits			17	0	10	21

III YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
4	CE501	Structural Analysis-II	3	0	0	3
2	CE502PC	Geotechnical Engineering	3	0	0	3
3	CE503PC	Structural Engineering –I (RCC)	3	1	0	4
4	CE504PC	Transportation Engineering	3	0	0	3
5		Professional Elective-I	3	0	0	3
6	SM505MS	Engineering Economics and Accountancy	2	0	0	2
7	CE506PC	Highway Engineering and Concrete Technology Lab	0	0	3	1.5
8	CE507PC	Geotechnical Engineering Lab	0	0	3	1.5
9	EN508HS	Advanced Communication Skills Lab	0	0	2	1
10	*MC509	Intellectual Property Rights	3	0	0	0
Total Credits			20	1	8	22

III YEAR II SEMESTER

S. No	Course Code	Course Title	L	T	P	Credits
1	CE601PC	Hydrology & Water Resources Engineering	3	1	0	4
1	CE602PC	Environmental Engineering	3	0	0	3
2	CE603PC	Foundation Engineering	3	0	0	3
3	CE604PC	Structural Engineering –II (Steel)	3	1	0	4
5		Professional Elective –II	3	0	0	3
6		Open Elective –I	3	0	0	3
7	CE605PC	Environmental Engineering Lab	0	0	2	1
8	CE606PC	Computer Aided Design Lab	0	0	2	1
9	*MC609	Environmental Science	3	0	0	0
Total Credits			21	2	4	22

***MC609 - Environmental Science – Should be Registered by Lateral Entry Students Only.**

IV YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CE701PC	Estimation, Costing and Project Management	3	1	0	4
2		Professional Elective –III	3	0	0	3
3		Professional Elective –IV	3	0	0	3

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech. in ELECTRICAL AND ELECTRONICS ENGINEERING
COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2018-19 Admitted Batch

I YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	MA101BS	Mathematics - I	3	1	0	4
2	CH102BS	Chemistry	3	1	0	4
3	EE103ES	Basic Electrical Engineering	3	0	0	3
4	ME105ES	Engineering Workshop	1	0	3	2.5
5	EN105HS	English	2	0	0	2
6	CH106BS	Engineering Chemistry Lab	0	0	3	1.5
7	EN107HS	English Language and Communication Skills Lab	0	0	2	1
8	EE108ES	Basic Electrical Engineering Lab	0	0	2	1
		Induction Programme				
		Total Credits	12	2	10	19

I YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	MA201BS	Mathematics - II	3	1	0	4
2	AP202BS	Applied Physics	3	1	0	4
3	CS203ES	Programming for Problem Solving	3	1	0	4
4	ME204ES	Engineering Graphics	1	0	4	3
5	AP205BS	Applied Physics Lab	0	0	3	1.5
6	CS206ES	Programming for Problem Solving Lab	0	0	3	1.5
7	*MC209ES	Environmental Science	3	0	0	0
		Total Credits	13	3	10	18

II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	EE301ES	Engineering Mechanics	3	1	0	4
2	EE302PC	Electrical Circuit Analysis	3	1	0	4
3	EE303PC	Analog Electronics	3	0	0	3
4	EE304PC	Electrical Machines - I	3	1	0	4
5	EE305PC	Electromagnetic Fields	3	0	0	3
6	EE306PC	Electrical Machines Lab - I	0	0	2	1
7	EE307PC	Analog Electronics Lab	0	0	2	1
8	EE308PC	Electrical Circuits Lab	0	0	2	1
9	*MC309	Gender Sensitization Lab	0	0	2	0
		Total Credits	15	3	8	21

II YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	MA401BS	Laplace Transforms, Numerical Methods & Complex variables	3	1	0	4

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech. in MECHANICAL ENGINEERING
COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2018-19 Admitted Batch

I YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	MA101BS	Mathematics - I	3	1	0	4
2	PH102BS	Engineering Physics	3	1	0	4
3	CS103ES	Programming for Problem Solving	3	1	0	4
4	ME104ES	Engineering Graphics	1	0	4	3
5	PH105BS	Engineering Physics Lab	0	0	3	1.5
6	CS106ES	Programming for Problem Solving Lab	0	0	3	1.5
7	*MC109ES	Environmental Science	3	0	0	0
		Induction Programme				
		Total Credits	13	3	10	18

I YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	MA201BS	Mathematics - II	3	1	0	4
2	CH202BS	Chemistry	3	1	0	4
3	ME203ES	Engineering Mechanics	3	1	0	4
4	ME205ES	Engineering Workshop	1	0	3	2.5
5	EN205HS	English	2	0	0	2
6	CH206BS	Engineering Chemistry Lab	0	0	3	1.5
7	EN207HS	English Language and Communication Skills Lab	0	0	2	1
		Total Credits	12	3	8	19.0

II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	MA301BS	Probability and Statistics & Complex Variables	3	1	0	4
2	ME302PC	Mechanics of Solids	3	1	0	4
3	ME303PC	Material Science and Metallurgy	3	0	0	3
4	ME304PC	Production Technology	3	0	0	3
5	ME305PC	Thermodynamics	3	1	0	4
6	ME306PC	Production Technology Lab	0	0	2	1
7	ME307PC	Machine Drawing Practice	0	0	2	1
8	ME308PC	Material Science and Mechanics of Solids Lab	0	0	2	1
9	*MC309	Constitution of India	3	0	0	0
		Total Credits	18	3	6	21

II YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	EE401ES	Basic Electrical and Electronics Engineering	3	0	0	3

2	ME402PC	Kinematics of Machinery	3	1	0	4
3	ME403PC	Thermal Engineering - I	3	1	0	4
4	ME404PC	Fluid Mechanics and Hydraulic Machines	3	1	0	4
5	ME405PC	Instrumentation and Control Systems	3	0	0	3
6	EE409ES	Basic Electrical and Electronics Engineering Lab	0	0	2	1
7	ME407PC	Fluid Mechanics and Hydraulic Machines Lab	0	0	2	1
8	ME408PC	Instrumentation and Control Systems Lab	0	0	2	1
10	*MC409	Gender Sensitization Lab	0	0	2	0
		Total Credits	15	3	8	21

III YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	ME501PC	Dynamics of Machinery	3	1	0	4
2	ME502PC	Design of Machine Members-I	3	0	0	3
3	ME503PC	Metrology & Machine Tools	3	0	0	3
4	SM504MS	Business Economics & Financial Analysis	3	0	0	3
5	ME505PC	Thermal Engineering-II	3	0	0	3
6	ME506PC	Operations Research	3	0	0	3
7	ME507PC	Thermal Engineering Lab	0	0	2	1
8	ME508PC	Metrology & Machine Tools Lab	0	0	2	1
9	ME509PC	Kinematics & Dynamics Lab	0	0	2	1
10	*MC510	Intellectual Property Rights	3	0	0	0
		Total Credits	21	1	6	22

III YEAR II SEMESTER

S. No	Course Code	Course Title	L	T	P	Credits
1	ME601PC	Design of Machine Members-II	3	0	0	3
2	ME602PC	Heat Transfer	3	1	0	4
3	ME603PC	CAD & CAM	3	0	0	3
4		Professional Elective - I	3	0	0	3
5		Open Elective - I	3	0	0	3
6	ME604PC	Finite Element Methods	3	0	0	3
7	ME605PC	Heat Transfer Lab	0	0	2	1
8	ME606PC	CAD & CAM Lab	0	0	2	1
9	EN608HS	Advanced Communication Skills lab	0	0	2	1
10	*MC609	Environmental Science	3	0	0	0
		Total Credits	21	1	6	22

IV YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	ME701PC	Refrigeration & Air Conditioning	3	0	0	3
2		Professional Elective - II	3	0	0	3
3		Professional Elective - III	3	0	0	3
4		Professional Elective - IV	3	0	0	3
5		Open Elective - II	3	0	0	3
6	ME702PC	Industrial Oriented Mini Project/ Summer Internship	0	0	0	2*
7	ME703PC	Seminar	0	0	2	1