**1.2.1 - Number of new courses introduced across all programmes offered during the year** 



# **SRI INDU COLLEGE OF ENGINEERING & TECHNOLOGY**

(AUTONOMOUS INSTITUTION UNDER UGC, NEW DELHI) ACCREDITED BY NBA & NAAC APPROVED BY AICTE, NEW DELHI, AFFILIATED TO JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD SHERIGUDA(V), IBRAHIMPATNAM(M), R.R.DIST. – 501 510. TELANGANA

# **Department of**

# **Computer Science & Information Technology**

(An Autonomous Institution under UGC, New Delhi)

# **Choice Based Credit System (CBCS)**

**REGULATIONS – BR20** 

# B. Tech. - COMPUTER SCIENCE & INFORMATION TECHNOLOGY

Common to EEE, CSE & IT

#### I YEAR I SEMESTER

#### **COURSE STRUCTURE**

S. No.	<b>Course Code</b>	Course Title	L	Т	Р	Credits
1	R20MTH1101	Mathematics – I				
T	1 1\201\1111101	(Linear Algebra and Calculus)	3	1	0	4
2	R20ECH1101	Chemistry	3	1	0	4
3	R20EEE1101	Basic Electrical Engineering	3	0	0	3
4	R20MED1101	Engineering Workshop	1	0	3	2.5
5	R20HAS1101	English	2	0	0	2
6	R20ECH11L1	Engineering Chemistry Lab	0	0	3	1.5
7	R20HAS11L2	English Language and Communication Skills				
/	K2011A511L2	lab	0	0	2	1
8	R20EEE11L3	Basic Electrical Engineering Lab	0	0	2	1
9	R20HAS1102	Environmental Science	3	0	0	0
10	R20IPG1101	Induction Programme for Three Weeks	0	0	0	0
Total Credits			15	2	10	19

## I YEAR II SEMESTER

## **COURSE STRUCTURE**

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	R20MTH1201	Mathematics – II				
1	R20101111201	(Advanced Calculus)	3	1	0	4
2	R20EAP1201	Applied Physics	3	1	0	4
3	R20CSE1101	Programming for Problem Solving	3	1	0	4
4	R20MED1102	Engineering Graphics	1	0	4	3
5	R20EAP12L1	Applied Physics Lab	0	0	3	1.5
6	R20CSE11L2	Programming for Problem Solving Lab	0	0	3	1.5
7	R20COI1101	Constitution of India	3	0	0	0
8	R20ITK1101	Essence of Indian Traditional Knowledge	3	0	0	0
Total Credits					10	18



Sri Indu College of Engineering and Technology (VIII): SHENGUDA-501 540, Ibrahimpatnem(M), R.R.Dist.

(An Autonomous Institution under UGC, New Delhi)

# **Choice Based Credit System (CBCS)**

**REGULATIONS – BR20** 

# **B. Tech. - COMPUTER SCIENCE & INFORMATION TECHNOLOGY**

#### **II YEAR I SEMESTER**

#### **COURSE STRUCTURE**

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	R20ECE2105	Analog Electronics	3	0	0	3
2	R20CSE2101	Data Structures	3	0	0	3
3	R20MTH2103	Probability & Statistical Methods	4	0	0	4
4	R20CSE2102	Computer Organization & Architecture	3	0	0	3
5	R20CSE2103	Object Oriented Programming using C++	3	0	0	3
6	R20ECE21L4	Analog Electronics Lab	0	0	2	1
7	R20CSE21L1	Data Structures Lab	0	0	3	1.5
8	R20CSE21L2	IT Workshop Lab	0	0	3	1.5
9	R20CSE21L3	C++ Programming Lab	0	0	2	1
10	R20MAC2100	Gender Sensitization Lab (An Activity-based	0	0	2	0
		Course)				
		Total Credits	15	1	12	21

#### **II YEAR II SEMESTER**

#### **COURSE STRUCTURE**

S. No.	<b>Course Code</b>	Course Title	L	Т	Р	Credits
1	R20CSE2201	Discrete Mathematics	3	0	0	3
2	R20ECE2102	Digital Logic Design	3	0	0	3
3	R20CSE2202	Operating Systems	3	0	0	3
4	R20CSE2203	Database Management Systems	3	1	0	4
5	R20CSE2204	Java Programming	3	1	0	4
6	R20CSE22L1	Operating Systems Lab	0	0	3	1.5
7	R20CSE22L2	Database Management Systems Lab	0	0	3	1.5
8	R20CSE22L3	Java Programming Lab	0	0	2	1
9	R20MAC2200	Intellectual Property Rights	3	0	0	0
		Total Credits	18	2	8	21



FINCTPAL Sri Indu College of Engineering and Technology (Viii): SHENGUDA-501 540, Ibrahimpathem(M), R.R.Dist.

# Department of **Data Science**

(An Autonomous Institution under UGC, New Delhi)

# **Choice Based Credit System (CBCS)**

**REGULATIONS – BR20** 

# **B. Tech. - CSE (DATA SCIENCE)**

Common to EEE, CSE & IT

# I YEAR I SEMESTER

#### **COURSE STRUCTURE**

S. No.	<b>Course Code</b>	Course Title	L	Т	Р	Credits
1	R20MTH1101	Mathematics – I				
1	K201VI111101	(Linear Algebra and Calculus)	3	1	0	4
2	R20ECH1101	Chemistry	3	1	0	4
3	R20EEE1101	Basic Electrical Engineering	3	0	0	3
4	R20MED1101	Engineering Workshop	1	0	3	2.5
5	R20HAS1101	English	2	0	0	2
6	R20ECH11L1	Engineering Chemistry Lab	0	0	3	1.5
7	R20HAS11L2	English Language and Communication Skills				
/	K2011A511L2	lab	0	0	2	1
8	R20EEE11L3	Basic Electrical Engineering Lab	0	0	2	1
9	R20HAS1102	Environmental Science	3	0	0	0
10	R20IPG1101	Induction Programme for Three Weeks	0	0	0	0
Total Credits			15	2	10	19

#### I YEAR II SEMESTER

#### **COURSE STRUCTURE**

S. No.	<b>Course Code</b>	Course Title	L	Т	Р	Credits
1	R20MTH1201	Mathematics – II (Advanced Calculus)	3	1	0	4
2	R20EAP1201	Applied Physics	3	1	0	4
3	R20CSE1101	Programming for Problem Solving	3	1	0	4
4	R20MED1102	Engineering Graphics	1	0	4	3
5	R20EAP12L1	Applied Physics Lab	0	0	3	1.5
6	R20CSE11L2	Programming for Problem Solving Lab	0	0	3	1.5
7	R20COI1101	Constitution of India	3	0	0	0
8	R20ITK1101	Essence of Indian Traditional Knowledge	3	0	0	0
	Total Credits					18



FRINCTPAL Sri Indu College of Engineering and Technology (Vill): SHEMBUDA-501 540, Ibrahimpatnem(M), R.R.Dist.

(An Autonomous Institution under UGC, New Delhi)

# **Choice Based Credit System (CBCS)**

**REGULATIONS – BR20** 

# **B. Tech. - CSE (DATA SCIENCE)**

#### II YEAR I SEMESTER

#### **COURSE STRUCTURE**

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	R20CSE2201	Discrete Mathematics	3	0	0	3
2	R20CSE2101	Data Structures	3	0	0	3
3	R20MTH2104	Mathematical and Statistical Foundations	3	1	0	4
4	R20CSE2102	Computer Organization & Architecture	3	0	0	3
5	R20CSE2104	Python Programming	2	0	0	2
6	R20MBA2201	Business Economics & Financial Analysis	3	0	0	3
7	R20CSE21L1	Data Structures Lab	0	0	3	1.5
8	R20CSE21L4	Python Programming Lab	0	0	3	1.5
9	R20MAC2100	Gender Sensitization Lab (An Activity-based Course)	0	0	2	0
		Total Credits	17	1	8	21

#### **II YEAR II SEMESTER**

#### **COURSE STRUCTURE**

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	R20CSE2206	Formal Language and Automata Theory	3	0	0	3
2	R20CSE2207	Software Engineering	3	0	0	3
3	R20CSE2202	Operating Systems	3	0	0	3
4	R20CSE2203	Database Management Systems	3	1	0	4
5	R20CSE2204	Java Programming	3	1	0	4
6	R20CSE22L1	Operating Systems Lab	0	0	3	1.5
7	R20CSE22L2	Database Management Systems Lab	0	0	3	1.5
8	R20CSE22L3	Java Programming Lab	0	0	2	1
9	R20MAC2200	Intellectual Property Rights	3	0	0	0
		Total Credits	18	2	8	21



Sri Insta Cal a of Engineering and Technology (VIII): SHERIGUDA-501 540, Ibrahimpatnem(M), R.R.Dist.

# Department of **Cyber Security**

(An Autonomous Institution under UGC, New Delhi)

# **Choice Based Credit System (CBCS)**

**REGULATIONS – BR20** 

# **B. Tech. - CSE (CYBER SECURITY)**

# Common to EEE, CSE & IT

# I YEAR I SEMESTER

#### **COURSE STRUCTURE**

S. No.	<b>Course Code</b>	Course Title	L	Т	Р	Credits
1	R20MTH1101	Mathematics – I				
1	K20W1H1101	(Linear Algebra and Calculus)	3	1	0	4
2	R20ECH1101	Chemistry	3	1	0	4
3	R20EEE1101	Basic Electrical Engineering	3	0	0	3
4	R20MED1101	Engineering Workshop	1	0	3	2.5
5	R20HAS1101	English	2	0	0	2
6	R20ECH11L1	Engineering Chemistry Lab	0	0	3	1.5
7	R20HAS11L2	English Language and Communication Skills				
/	K2011A511L2	lab	0	0	2	1
8	R20EEE11L3	Basic Electrical Engineering Lab	0	0	2	1
9	R20HAS1102	Environmental Science	3	0	0	0
10	R20IPG1101	Induction Programme for Three Weeks	0	0	0	0
Total Credits			15	2	10	19

#### I YEAR II SEMESTER

#### **COURSE STRUCTURE**

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	R20MTH1201	Mathematics – II (Advanced Calculus)	3	1	0	4
2	R20EAP1201	Applied Physics	3	1	0	4
3	R20CSE1101	Programming for Problem Solving	3	1	0	4
4	R20MED1102	Engineering Graphics	1	0	4	3
5	R20EAP12L1	Applied Physics Lab	0	0	3	1.5
6	R20CSE11L2	Programming for Problem Solving Lab	0	0	3	1.5
7	R20COI1101	Constitution of India	3	0	0	0
8	R20ITK1101	Essence of Indian Traditional Knowledge	3	0	0	0
	Total Credits					18



Sri Insta Ca neering and Technology (VIII): SHERIGUDA-501 510, Ibrahimpatnem(M), R.R.Dist.

(An Autonomous Institution under UGC, New Delhi)

# **Choice Based Credit System (CBCS)**

**REGULATIONS – BR20** 

# **B. Tech. - CSE (CYBER SECURITY)**

#### **II YEAR I SEMESTER**

#### **COURSE STRUCTURE**

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	R20ECE2106	Analog and Digital Electronics	3	0	0	3
2	R20CSE2101	Data Structures	3	0	0	3
3	R20MTH2104	Mathematical and Statistical Foundations	3	1	0	4
4	R20CSE2102	Computer Organization & Architecture	3	0	0	3
5	R20CSE2104	Python Programming	2	0	0	2
6	R20ECE21L5	Analog and Digital Electronics Lab	0	0	3	1.5
7	R20CSE21L1	Data Structures Lab	0	0	3	1.5
8	R20CSE21L2	IT Workshop Lab	0	0	3	1.5
9	R20CSE21L4	Python Programming Lab	0	0	3	1.5
10	R20MAC2100	Gender Sensitization Lab (An Activity-based	0	0	2	0
10	K201v1AC2100	Course)				
		Total Credits	14	1	14	21

#### **II YEAR II SEMESTER**

#### **COURSE STRUCTURE**

					COURSESTREETCRE				
S. No.	Course Code	Course Title	L	Т	Р	Credits			
1	R20CSE2201	Discrete Mathematics	3	0	0	3			
2	R20MBA2201	Business Economics & Financial Analysis	3	0	0	3			
3	R20CSE2202	Operating Systems	3	0	0	3			
4	R20CSE2205	Computer Networks	3	1	0	4			
5	R20CSE2204	Java Programming	3	1	0	4			
6	R20CSE22L1	Operating Systems Lab	0	0	3	1.5			
7	R20CSE22L4	Computer Networks Lab	0	0	3	1.5			
8	R20CSE22L3	Java Programming Lab	0	0	2	1			
9	R20MAC2200	Intellectual Property Rights	3	0	0	0			



Sri Indu College of Engineering and Technology (Viii): SHERNGUDA-501 540,

Ibrahimpatnem(M), R.R.Dist.

Department of Internet of Things

(An Autonomous Institution under UGC, New Delhi)

# **Choice Based Credit System (CBCS)**

**REGULATIONS – BR20** 

# B. Tech. - CSE (INTERNET OF THINGS (IoT))

# Common to EEE, CSE & IT

I YEAR I SEMESTER

#### **COURSE STRUCTURE**

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	R20MTH1101	Mathematics – I				
1	K20W1H1101	(Linear Algebra and Calculus)	3	1	0	4
2	R20ECH1101	Chemistry	3	1	0	4
3	R20EEE1101	Basic Electrical Engineering	3	0	0	3
4	R20MED1101	Engineering Workshop	1	0	3	2.5
5	R20HAS1101	English	2	0	0	2
6	R20ECH11L1	Engineering Chemistry Lab	0	0	3	1.5
7	R20HAS11L2	English Language and Communication Skills				
/	K2011A511L2	lab	0	0	2	1
8	R20EEE11L3	Basic Electrical Engineering Lab	0	0	2	1
9	R20HAS1102	Environmental Science	3	0	0	0
10	R20IPG1101	Induction Programme for Three Weeks	0	0	0	0
	Total Credits			2	10	19

#### I YEAR II SEMESTER

#### **COURSE STRUCTURE**

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	R20MTH1201	Mathematics – II (Advanced Calculus)	3	1	0	4
2	R20EAP1201	Applied Physics	3	1	0	4
3	R20CSE1101	Programming for Problem Solving	3	1	0	4
4	R20MED1102	Engineering Graphics	1	0	4	3
5	R20EAP12L1	Applied Physics Lab	0	0	3	1.5
6	R20CSE11L2	Programming for Problem Solving Lab	0	0	3	1.5
7	R20COI1101	Constitution of India	3	0	0	0
8	R20ITK1101	Essence of Indian Traditional Knowledge	3	0	0	0
	Total Credits			3	10	18



pering and Technology (VIII): SHEMGUDA-501 510, Ibrahimpatnem(M), R.R.Dist.

(An Autonomous Institution under UGC, New Delhi)

# **Choice Based Credit System (CBCS)**

**REGULATIONS – BR20** 

# B. Tech. - CSE (INTERNET OF THINGS (IoT))

#### **II YEAR I SEMESTER**

#### **COURSE STRUCTURE**

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	R20ECE2106	Analog and Digital Electronics	3	0	0	3
2	R20CSE2101	Data Structures	3	0	0	3
3	R20MTH2103	Probability & Statistical Methods	4	0	0	4
4	R20CSE2201	Discrete Mathematics	3	0	0	3
5	R20CSE2104	Python Programming	2	0	0	2
6	R20ECE21L5	Analog and Digital Electronics Lab	0	0	3	1.5
7	R20CSE21L1	Data Structures Lab	0	0	3	1.5
8	R20CSE21L2	IT Workshop Lab	0	0	3	1.5
9	R20CSE21L4	Python Programming Lab	0	0	3	1.5
10	R20MAC2100	Gender Sensitization Lab (An Activity-based	0	0	2	0
10	K20IVIAC2100	Course)				
		Total Credits	15	0	14	21

## II YEAR II SEMESTER

## **COURSE STRUCTURE**

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	R20CSE2102	Computer Organization & Architecture	3	0	0	3
2	R20MBA2201	Business Economics & Financial Analysis	3	0	0	3
3	R20CSE2202	Operating Systems	3	0	0	3
4	R20CSE2205	Computer Networks	3	1	0	4
5	R20CSE2204	Java Programming	3	1	0	4
6	R20CSE22L1	Operating Systems Lab	0	0	3	1.5
7	R20CSE22L4	Computer Networks Lab	0	0	3	1.5
8	R20CSE22L3	Java Programming Lab	0	0	2	1
9	R20MAC2200	Intellectual Property Rights	3	0	0	0



Sri Indu College of Engineering and Technology

(VIII): SHERIGUDA-501 540, Ibrahimpathem(M), R.R.Dist.

# **Department of**

# **Artificial Intelligence & Machine Learning**

(An Autonomous Institution under UGC, New Delhi)

# **Choice Based Credit System (CBCS)**

**REGULATIONS – BR20** 

# B. Tech. CSE (ARTIFICIAL INTELLIGENCE & MACHINE LEARNING)

Common to EEE, CSE & IT

#### I YEAR I SEMESTER

#### **COURSE STRUCTURE**

S. No.	<b>Course Code</b>	Course Title	L	Т	Р	Credits
1	R20MTH1101	Mathematics – I				
1	K201V1111101	(Linear Algebra and Calculus)	3	1	0	4
2	R20ECH1101	Chemistry	3	1	0	4
3	R20EEE1101	Basic Electrical Engineering	3	0	0	3
4	R20MED1101	Engineering Workshop	1	0	3	2.5
5	R20HAS1101	English	2	0	0	2
6	R20ECH11L1	Engineering Chemistry Lab	0	0	3	1.5
7	R20HAS11L2	English Language and Communication Skills				
/	K20HA511L2	lab	0	0	2	1
8	R20EEE11L3	Basic Electrical Engineering Lab	0	0	2	1
9	R20HAS1102	Environmental Science	3	0	0	0
10	R20IPG1101	Induction Programme for Three Weeks	0	0	0	0
	Total Credits			2	10	19

# I YEAR II SEMESTER

# **COURSE STRUCTURE**

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	R20MTH1201	Mathematics – II				
1	<b>K20W11111201</b>	(Advanced Calculus)	3	1	0	4
2	R20EAP1201	Applied Physics	3	1	0	4
3	R20CSE1101	Programming for Problem Solving	3	1	0	4
4	R20MED1102	Engineering Graphics	1	0	4	3
5	R20EAP12L1	Applied Physics Lab	0	0	3	1.5
6	R20CSE11L2	Programming for Problem Solving Lab	0	0	3	1.5
7	R20COI1101	Constitution of India	3	0	0	0
8	R20ITK1101	Essence of Indian Traditional Knowledge	3	0	0	0
	Total Credits			3	10	18



FRINCTPAL Sri Indu College of Engineering and Technology (Viit): SHENIGUDA-501 540, Ibrahimpathem(M), R.R.Dist.

(An Autonomous Institution under UGC, New Delhi)

# **Choice Based Credit System (CBCS)**

**REGULATIONS – BR20** 

# **B. Tech. CSE (ARTIFICIAL INTELLIGENCE & MACHINE LEARNING)**

## II YEAR I SEMESTER

# **COURSE STRUCTURE**

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	R20CSE2201	Discrete Mathematics	3	0	0	3
2	R20CSE2101	Data Structures	3	0	0	3
3	R20MTH2104	Mathematical and Statistical Foundations	3	1	0	4
4	R20CSE2102	Computer Organization & Architecture	3	0	0	3
5	R20CSE2104	Python Programming	2	0	0	2
6	R20MBA2201	Business Economics & Financial Analysis	3	0	0	3
7	R20CSE21L1	Data Structures Lab	0	0	3	1.5
8	R20CSE21L4	Python Programming Lab	0	0	3	1.5
9	R20MAC2100	Gender Sensitization Lab (An Activity-based Course)	0	0	2	0
		Total Credits	17	1	8	21

## II YEAR II SEMESTER

## **COURSE STRUCTURE**

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	R20CSE2206	Formal Language and Automata Theory	3	0	0	3
2	R20CSE2207	Software Engineering	3	0	0	3
3	R20CSE2202	Operating Systems	3	0	0	3
4	R20CSE2203	Database Management Systems	3	1	0	4
5	R20CSE2204	Java Programming	3	1	0	4
6	R20CSE22L1	Operating Systems Lab	0	0	3	1.5
7	R20CSE22L2	Database Management Systems Lab	0	0	3	1.5
8	R20CSE22L3	Java Programming Lab	0	0	2	1
9	R20MAC2200	Intellectual Property Rights	3	0	0	0
		Total Credits	18	2	8	21



Sri Indu College of Engineering and Technology (VIII): SHENGUDA-501 540, Ibrahimpatnem(M), R.R.Dist.