

## **COURSE STRUCTURE**

**For**

## **INFORMATION TECHNOLOGY**

*(Applicable for batches admitted from 2016-2017)*



**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA**  
**KAKINADA - 533 003, Andhra Pradesh, India**

## I Year - I Semester

S. No.	Subjects	L	T	P	Credits
1-HS	English – I	4	--	--	3
2-BS	Mathematics - I	4	--	--	3
3-BS	Mathematics – II (Computational Mathematics)	4	--	--	3
4-BS	Applied Physics	4	--	--	3
5	Computer Programming using C	3	--	--	3
6-ES	Engineering Drawing	4	--	--	3
7-HS	English - Communication Skills Lab	--	--	3	2
8-BS	Applied / Engineering Physics Lab	--	--	3	2
9-ES	Applied / Engineering Physics – Virtual Labs – Assignments	--	--	2	--
10	C-Programming Lab	--	--	3	2
<b>Total Credits</b>					<b>24</b>

## I Year - II Semester

S. No.	Subjects	L	T	P	Credits
1-HS	English – II	4		--	3
2	Object Oriented Programming through C++	4		--	3
3-BS	Applied Chemistry	4		--	3
4-ES	Engineering Mechanics	4		--	3
5-HS	Environmental Studies	4		--	3
6-ES	Network Analysis	4		--	3
7-BS	Applied / Engineering Chemistry Laboratory	--		3	2
8	Object Oriented Programming Lab	--		3	2
9-ES	Engg. Workshop & IT Workshop	--		3	2
<b>Total Credits</b>					<b>24</b>

## II Year - I Semester

S. No.	Subjects	L	T	P	Credits
1-HS	Statistics with R Programming	4	--	--	3
2	Mathematical Foundations of Computer Science	4	--	--	3
3	Digital Logic Design	4	--	--	3
4	Python Programming	4	--	--	3
5	Data Structures through C++	4	--	--	3
6	Software Engineering	4	--	--	3
7	Data Structures through C++ Lab	--	--	3	2
8	Python Programming Lab	--	--	3	2
<b>Total Credits</b>					<b>22</b>

## II Year - II Semester

S. No.	Subjects	L	T	P	Credits
1	Computer Graphics	4	--	--	3
2	Java Programming	4	--	--	3
3	E-Commerce	4	--	--	3
4	Computer Organization	4	--	--	3
5	Object Oriented Analysis and Design using UML	4	--	--	3
6	Principles of Programming Languages	4	--	--	3
7	Unified Modeling Languages Lab	--	--	3	2
8	Java Programming Lab	--	--	3	2
<b>Total Credits</b>					<b>22</b>

### III Year - I Semester

S. No.	Subjects	L	T	P	Credits
1	Human Computer Interaction	4	--	--	3
2	Unix and Shell Programming	4	--	--	3
3	Advanced Java Programming	4	--	--	3
4	Database Management Systems	4	--	--	3
5	Operating Systems	4	--	--	3
6	Advanced Java Programming Lab	--	--	--	2
7	Unix and Operating Systems Lab	--	--	3	2
8	Database Management System Lab	--	--	3	2
MC	Professional Ethics & Human Values	--	3	--	--
<b>Total Credits</b>					<b>21</b>

### III Year - II Semester

S. No.	Subjects	L	T	P	Credits
1	Computer Networks	4	--	--	3
2	Data Mining	4	--	--	3
3	Web Technologies	4	--	--	3
4	Software Testing Methodologies	4	--	--	3
5	<b>Open Elective:</b> i. Artificial Intelligence ii. Social Networks and Semantic Web iii. Digital Signal Processing iv. Embedded Systems v. Robotics vi. Operations Research	4	--	--	3
6	Web Technologies Lab	--	--	3	2
7	Software Testing Lab	--	--	3	2
8	Data Mining Lab	--	--	3	2
9	IPR & Patents	--	2	--	--
<b>Total Credits</b>					<b>21</b>

## IV Year - I Semester

S. No.	Subjects	L	T	P	Credits
1	Cryptography and Network Security	4	--	--	3
2	Mobile Computing	4	--	--	3
3	Data Ware Housing and Business Intelligence	4	--	--	3
4- HS	Managerial Economics and Financial Analysis	4	--	--	3
5	<b>Elective-I</b> i. Data Analytics ii. Information Retrieval Systems iii. Internet of Things iv. Multimedia Programming	4	--	--	3
6	<b>Elective-II</b> i. Cloud Computing ii. Software Project Management iii. Machine Learning iv. Decision Support System	4	--	--	3
7	Mobile Computing Lab	--	--	3	2
8	Cryptography and Network Security Lab	--	--	3	2
<b>Total Credits</b>					<b>22</b>

## IV Year - II Semester

S. No.	Subjects	L	T	P	Credits
1	Distributed Systems	4	--	--	3
2- HS	Management Science	4	--	--	3
3	Management Information System	4	--	--	3
4	<b>Elective-III</b> i. Concurrent and Parallel Programming ii. Cyber Security iii. Artificial Neural Networks iv. Software Quality Assurance	4	--	--	3
5	Seminar	--	3	--	2
6	Project	--	--	--	10
<b>Total credits</b>					<b>24</b>

**Total Course Credits = 48+44 + 42 + 46 = 180**