NBA CODE	Course Code	Course Name	Abbrivatio n	NBA CODE	со	Course Outcomes
C101	311302	BASIC MATHEMATICS	BMS	C101	CO1	Apply the concepts of algebra to solve engineering (discipline) related problems.
	311302	BASIC MATHEMATICS	BMS	C101	CO2	Utilize trigonometry to solve branch specific engineering problems.
	311302	BASIC	BMS	C101	CO3	Solve area specific engineering problems under given conditions of straight lines.
	311302	BASIC MATHEMATICS	BMS	C101	CO4	Apply differential calculus to solve discipline specific problems.
	311302	BASIC MATHEMATICS	BMS	C101	CO5	Use techniques and methods of statistics to crack discipline specific problems.
	311303	COMMUNICATI ON SKILLS (ENGLISH)	ENG	C102	CO1	Construct grammatically correct sentences in English
	311303	COMMUNICATI ON SKILLS (ENGLISH)	ENG	C102	CO2	Compose paragraphs and dialogues on given situations
C102	311303	COMMUNICATI ON SKILLS (ENGLISH)	ENG	C102	CO3	Comprehend passages correctly.
	311303	COMMUNICATI ON SKILLS (ENGLISH)	ENG	C102	CO4	Use contextual words in English appropriately
	311303	COMMUNICATI ON SKILLS (ENGLISH)	ENG	C102	CO5	Deliver effective presentations in English using appropriate body language
	311305	BASIC	BSC	C103	CO1	Use basic instruments to measure the physical quantities in various engineering situations.
	311305	BASIC SCIENCE	BSC	C103	CO2	Apply the basic principles of electromagnetics to solve given engineering problems.
C103	311305	BASIC SCIENCE	BSC	C103	CO3	Apply basic principles of thermometry and fibre optics to solve engineering problems.
	311305	BASIC SCIENCE	BSC	C103	CO4	Predict the structure, properties and behaviour of molecules and compounds based on the types of chemical bond.
	311305	BASIC SCIENCE	BSC	C103	CO5	Apply the concepts of electrochemistry and corrosion preventive measures in industry.
	311305	BASIC SCIENCE	BSC	C103	CO6	Use the appropriate engineering material and catalyst appropriately.
	2110.01	FUNDAMENTAL	ICT	C10.4	601	
	311001	S OF ICT FUNDAMENTAL		C104	001	Use computer system and its peripherals for given purpose
	311001	S OF ICT		C104	CO2	Prepare Business document using word Processing Tool
C104	211001	FUNDAMENTAL		C104	CO3	Analyze Data and represent it graphically using spreadsheet
	211001	FUNDAMENTAL		C104	CO4	
	211001	FUNDAMENTAL		C104	CO3	Surfain exposed and explications of Experime Technologies
	311001	S OF ICT	ICT	C104	006	Explain concept and applications of Emerging Technologies
C105	311002	ENGINEERING WORKSHOP PRACTICE	WPC	C105	CO1	Carry-out elementary level maintenance of a PC.
	311002	ENGINEERING WORKSHOP PRACTICE	WPC	C105	CO2	Create partitions and format hard disk drive.
	311002	ENGINEERING WORKSHOP PRACTICE	WPC	C105	CO3	Install and configure Operating system.
	311002	ENGINEERING WORKSHOP PRACTICE	WPC	C105	CO4	Configure different types of peripheral devices.
	311002	ENGINEERING WORKSHOP PRACTICE	WPC	C105	CO5	Setup small Local Area Network.
	311002	ENGINEERING WORKSHOP PRACTICE	WPC	C105	CO6	Use diagnostic software for fault finding in Computer system.
		. WIGHTEL				

C106	311003	YOGA AND MEDITATION	YAM	C106	CO1	Practice basic Yoga and Pranayama in daily life to maintain physical and mental fitness.
	311003	YOGA AND MEDITATION	YAM	C106	CO2	Practice meditation regularly for improving concentration and better handling of stress and anxiety.
	311003	YOGA AND MEDITATION	YAM	C106	CO3	Follow healthy diet and hygienic practices for maintaining good health.
C107	311008	ENGINEERING GRAPHICS	EGP	C107	CO1	Draw geometrical figures and engineering curves.
	311008	ENGINEERING GRAPHICS	EGP	C107	CO2	Apply principles of orthographic projections for drawing given pictorial views.
	311008	ENGINEERING GRAPHICS	EGP	C107	CO3	Apply basic CAD commands for drawing different entities.
	311008	ENGINEERING GRAPHICS	EGP	C107	CO4	Use various drawing codes, conventions and symbols as per IS SP-46 in engineering drawing.
	311008	ENGINEERING GRAPHICS	EGP	C107	CO5	Draw free hand sketches of given engineering elements.
	312301	APPLIED MATHEMATICS	AMS	C108	CO1	Solve the broad-based engineering problems of integration using suitable methods.
	312301	APPLIED MATHEMATICS	AMS	C108	CO2	Use definite integration to solve given engineering related problems.
C108	312301	APPLIED MATHEMATICS	AMS	C108	CO3	Apply the concept of differential equation to find the solutions of given engineering problems.
	312301	APPLIED MATHEMATICS	AMS	C108	CO4	Employ numerical methods to solve programme specific problems.
	312301	APPLIED MATHEMATICS	AMS	C108	CO5	Use probability distributions to solve elementary engineering problems.
		DAGIC				
	312302	ELECTRICAL AND ELECTRONICS ENGINEERING	BEE	C109	CO1	Calculate and measure basic electrical quantities and parameters.
	312302	BASIC ELECTRICAL AND ELECTRONICS ENGINEERING	BEE	C109	CO2	Use different electrical machines by making connections.
6400	312302	BASIC ELECTRICAL AND ELECTRONICS ENGINEERING	BEE	C109	CO3	Use electrical safety devices in electrical circuit
C109	212202	BASIC ELECTRICAL AND ELECTRONICS	DEE	C109	604	Lice relevant diede in different electropic eirevite
	312302	BASIC	DLL	0107	004	Use relevant diode in different electronic circuits.
	312302	ELECTRICAL AND ELECTRONICS ENGINEERING	BEE	C109	CO5	Use BJT and FET in various electronic circuits.
	312302	BASIC ELECTRICAL AND ELECTRONICS ENGINEERING	BEE	C109	CO6	Use various types of sensors and transducers.
	312303	PROGRAMMIN	PIC	C110	CO1	Develop C program using input - output functions and arithmetic expressions
C110	312303	PROGRAMMIN G IN C	PIC	C110	CO2	Develop C program involving branching and looping statements
	312303	PROGRAMMIN G IN C	PIC	C110	CO3	Implement Arrays and structures using C programs
	312303	PROGRAMMIN G IN C	PIC	C110	CO4	Develop C program using user-defined functions
	312303	PROGRAMMIN G IN C	PIC	C110	CO5	Write C program using pointer
	312001		BLP	C111	CO1	Install Linux operating system
C111	0.000		20		001	Execute general purpose commands of the Linux operating
	312001	LINUX BASICS	BLP	C111	CO2	system.
	312001	LINUX BASICS	BLL	C111	CO3	Ivianage files and directories in Linux operating system.
	312001	LINUX BASICS	BLP BI D	C111	CO5	Write programs using shell script
	512001	LINOX DASICS	DLI		000	mite programs using shell script.

	312002	PROFESSIONA L COMMUNICATI ON	PCO	C112	CO1	Communicate effectively (oral / spoken and Written) in various formal and informal situations minimizing the barriers.
C112	312002	PROFESSIONA L COMMUNICATI ON	PCO	C112	CO2	Develop listening skills through active listening and note taking.
	312002	PROFESSIONA L COMMUNICATI ON	PCO	C112	CO3	Write circulars, notices and minutes of the meeting.
	312002	PROFESSIONA L COMMUNICATI ON	PCO	C112	CO4	Draft inquiry letter, complaint letter , Job application with resume / CV, Compose effective E - mails .
	312002	PROFESSIONA L COMMUNICATI ON	PCO	C112	CO5	Write Industrial reports.
	312003	SOCIAL AND LIFE SKILLS	SFS	C113	CO1	Enhance the ability to be fully self-aware and take challenges by overcoming all fears and insecurities and grow fully.
	312003	SOCIAL AND LIFE SKILLS	SFS	C113	CO2	Increase self-knowledge and awareness of emotional skills and emotional intelligence at the place of study/work.
C113	312003	SOCIAL AND LIFE SKILLS	SFS	C113	CO3	Provide the opportunity to realizing self-potential through practical experience while working individually or in group.
	312003	SOCIAL AND LIFE SKILLS	SFS	C113	CO4	Develop interpersonal skills and adopt good leadership behaviour for self-empowerment and empowerment of others.
	312003	SOCIAL AND LIFE SKILLS	SFS	C113	CO5	Set appropriate life goals with managing stress and time effectively.
		WER PAGE				
C114	312004	DESIGNING WEB PAGE	WPD	C114	CO1	Use HTML formatting tags to present content on web page.
	312004	DESIGNING	WPD	C114	CO2	Develop web page using list and hyperlinks.
	312004	DESIGNING	WPD	C114	CO3	Develop web pages using images, colors and backgrounds.
	312004	DESIGNING	WPD	C114	CO4	Design HTML forms using table and frames.
	312004	WEB PAGE DESIGNING	WPD	C114	CO5	Apply presentation schemes on content using CSS.
	312004	DESIGNING	WPD	C114	CO6	Publish websites on internet or intranet.
C44F	311011	EXIT-INTERNSH IP01	El1	C115	CO1	Acquire essential employable skills at exit level.
CHS	311011	EXIT-INTERNSH IP01	El1	C115	CO2	Establish effective communication in working environment.
	313301	DATA STRUCTURE USING C	DSU	C201	CO1	Perform basic operations on Arrays.
	313301	DATA STRUCTURE USING C	DSU	C201	CO2	Apply different Searching and Sorting methods.
<b>6</b> 004	313301	DATA STRUCTURE USING C	DSU	C201	CO3	Implement basic operations on Linked List.
C201	313301	DATA STRUCTURE USING C	DSU	C201	CO4	Perform operations on Stack using Array and Linked List Implementations.
	313301	DATA STRUCTURE USING C	DSU	C201	CO5	Perform operations on Queue using Array and Linked List
	313301	DATA STRUCTURE USING C	DSU	C201	CO6	Create and Traverse Tree to solve problems.
	313302	DATABASE MANAGEMENT SYSTEM	DMS	C202	CO1	Explain concept of database management system.
	313302	DATABASE MANAGEMENT SYSTEM	DMS	C202	CO2	Design the database for given problem.
C202	313302	DATABASE MANAGEMENT SYSTEM	DMS	C202	CO3	Manage database using SQL.
	313302	DATABASE MANAGEMENT SYSTEM	DMS	C202	CO4	Implement PL/SQL codes for given application.

	212202	DATABASE MANAGEMENT	DMC	C202	COF	
	313302	SYSTEM	DIVIS	C202	05	Apply security and backup methods on database.
C203	313304	OBJECT ORIENTED PROGRAMMIN G USING C++	OOP	C203	CO1	Write C++ programs using classes and objects.
	313304	OBJECT ORIENTED PROGRAMMIN	OOP	C203	CO2	Develop C++ programs using constructors
	01000 1	OBJECT ORIENTED PROGRAMMIN	000	0000	002	
	313304	G USING C++ OBJECT	OOP	C203	CO3	Implement Inheritance in C++.
	313304	ORIENTED PROGRAMMIN G USING C++	OOP	C203	CO4	Implement Polymorphism in C++.
	313304	OBJECT ORIENTED PROGRAMMIN G USING C++	OOP	C203	CO5	Develop C++ programs to perform file operations.
		DIGITAL				
	313305	AND MICROPROCE SSORS	DTM	C204	CO1	Test logic gates and digital systems.
	0.0000	DIGITAL	2	010 .		
	313305	AND MICROPROCE SSORS	DTM	C204	CO2	Use basic combinational and sequential logic circuits employing digital ICs.
C204	212205	DIGITAL TECHNIQUES AND MICROPROCE	DTM	C204	<u> </u>	Perform operations on registers using 2024 instructions
	313305	DIGITAL		C204	003	Perform operations on registers using 8086 instructions.
	313305	AND MICROPROCE SSORS	DTM	C204	CO4	Use 8086 microprocessor environment to build and execute assembly language programs.
	313305	DIGITAL TECHNIQUES AND MICROPROCE SSORS	DTM	C204	CO5	Develop assembly language programming in 8086 to implement loops and branching instructions.
	313002	ESSENCE OF INDIAN CONSTITUTIO N	EIC	C205	CO1	List salient features and characteristics of the constitution of India.
C005	313002	ESSENCE OF INDIAN CONSTITUTIO N	EIC	C205	CO2	Follow fundamental rights and duties as responsible citizen of the country.
C205	313002	ESSENCE OF INDIAN CONSTITUTIO N	EIC	C205	CO3	Analyze major constitutional amendments in the constitution.
		ESSENCE OF INDIAN				
	313002	CONSTITUTIO N	EIC	C205	CO4	Follow procedure to cast vote using voter-id.
C206	313003	APPLIED MULTIMEDIA TECHNIQUES	AMT	C206	CO1	Manipulate color models of image.
	313003	APPLIED MULTIMEDIA TECHNIQUES	AMT	C206	CO2	Perform edit operation on text and images using graphics processing tools.
	313003	APPLIED MULTIMEDIA TECHNIQUES	AMT	C206	CO3	Perform basic audio editing operations.
	313003	APPLIED MULTIMEDIA TECHNIQUES	AMT	C206	CO4	Perform basic video editing operations.
	313003	APPLIED MULTIMEDIA TECHNIQUES	AMT	C206	CO5	Create simple 2D Animation.
	313003	APPLIED MULTIMEDIA TECHNIQUES	AMT	C206	CO6	Design Web Pages with Multimedia components.