Jyothi Engineering College

NAAC Accredited College with **NBA** Accredited Programmes*

Approved by AICTE & affiliated to APJ Abdul Kalam Technological University

A CENTRE OF EXCELLENCE IN SCIENCE & TECHNOLOGY BY THE CATHOLIC ARCHDIOCESE OF TRICHUR

JYOTHI HILLS, VETTIKATTIRI P.O. CHERUTHURUTHY, THRISSUR, PIN-679531 PH : +91- 4884-259000, 274423 FAX : 04884-274777

NBA accredited B.Tech Programmes in Computer Science & Engineering, Electronics & Communication Engineering, Electrical & Electronics Engineering and Mechanical Engineering valid for the academic years 2016-2022. NBA accredited B.Tech Programme in Civil Engineering valid for the academic years 2019-2022.

Summary report of each program, year-wise along with their outcome

2019-20

Sl. No.	Name of Add on /Certificate programs offered	Date & Duration of course	Agency conducted	Year of offering	No. of times offered during the same year	Course Outcome
1	Introduction to VHDL	41 HOURS	EEE Department, JECC	2019	1	1. Students Will be able to write VHDL code for simple digital hardware designs 2. Students Will be able to design and implement various combinational and sequential digital circuits using different styles of modelling of VHDL. 3. Students Will be able to simulate and validate a digital design/logic using VHDL with the help of ModelSim/ Xilinx Software
2	EMBEDDED SYSTEMS DESIGN WITH 8051	31 HOURS	MR Department, JECC	2019	1	1. Understand the concept of embedded system, microcontroller, different components of microcontroller and their interactions. 2. Get familiarized with programming environment to develop embedded solutions. 3. Program ARM microcontroller to perform various tasks. 4. Understand the key concepts

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					of embedded systems such as I/O, timers, interrupts and interaction with peripheral devices.
3	CCTV INSTALLATION	31 HOURS	ECE Department, JECC	2019	2	1. Students Will be able to Interact with customer and supervisor and understand customers requirements 2. Students Will be able to Procuring CCTV hardware and test before installation 3. Students Will be able to Connecting cables and Setting up the camera using tools, Setting CCTV camera and DVR with the system
4	WORKSHOP ON 3-D DESIGN & 3-D PRINTING (FABLAB)	30 HOURS	FABLAB, JECC	2019	1	1. Develop CAD models for 3D printing. 2. Import and Export CAD data and generate .stl file. 3. Select a specific material for the given application. 4. Select a 3D printing process for an application.
5	COMPUTER AIDED DESIGN	32 HOURS	ME Department, JECC	2019	2	1. Gain working knowledge in Computer Aided Design methods 2. Gain working knowledge in Computer Aided Design procedures
6	Introduction to VHDL	35 Hours	EEE Department, JECC	2020	1	1. Students Will be able to write VHDL code for simple digital hardware designs 2. Students Will be able to design and implement various combinational and sequential

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					digital circuits using different styles of modelling of VHDL. 3. Students Will be able to simulate and validate a digital design/logic using VHDL with the help of ModelSim/ Xilinx Software
7	Domestic Water Pollution and Remedial Measures	30 HOURS	CE Department, JECC	2020	1	1. Explain the need for wastewater treatment, categorize the wastewater based on characteristics 2. Understand and apply the design principles and criteria in designing units 3. Illustrate wastewater treatment systems for rural areas and explain the applicability of natural systems for treatment of wastewater.
8	Basics of Programming	30 HOURS	CSE Department, JECC	2020	1	1. use the fundamental programming constructs with clear understanding of their working 2. Think recursively to arrive at solutions and convert them to iterative programs if needed 3. Apply OOP concepts and apply them to model software solutions.
9	Programming Python (InfyTQ)	30 HOURS	CSE Department, JECC	2020	1	1.Define and demonstrate the use of built-in data structures "lists" and "dictionary". 2.Design and implement a program to solve a real world problem. 3.Design and implement GUI

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					application and how to handle exceptions and files. 4.Make database connectivity in python programming language.
10	Full Stack developer – Phase 1	30 HOURS	CSE Department, JECC	2020	1	1.Develop interactive Web pages using HTML. 2.Present a professional document using Cascaded Style Sheets. 3.Understand and practice web page designing techniques 4.Understand and practice embedded dynamic scripting on client side Internet Programming.
11	Electronic Circuit Simulation and PCB Printing	32 HOURS	MR Department, JECC	2020	1	1.Student will be able to design and simulate electronic circuit suing EDA tool. 2.Student will be able to design single sided PCB using EDA tool. Student will be able to print PCB using toner transfer method.
12	Fundamentals of MATLAB	30 HOURS	CSE Department, JECC	2020	1	1.Students will develop programming skills and technique to solve mathematical problems. 2. Students will use graphic features of MATLAB will be able to use this feature effectively in the various applications. 3. Students will be able to use MATLAB as a simulation tool. 4. Students will be able to work as a 'MATLAB programmer' in the industry.
13	Laser and Vinyl Cutter	30	EEE	2020	1	1.To demonstrate and describe parametric 2D modeling

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		Department, JECC				processes 2. To identify and explain processes, develop, evaluate and construct the final project.
14	NPTEL			2020	1	

2018-19

Sl. No.	Name of Add on /Certificate programs offered	Date & Duration of course	Agency conducted	Year of offering	No. of times offered during the same year	Course Outcome
1	BEC	1 Year	EFLI	2018	1	1. Develop basic skills to deal with people in business situations. 2. Increase their knowledge of key business concepts worldwide. 3. Write and read basic business reports, faxes, and memos. 4. Expand vocabulary related to general business situations.
2	Programming Python	35 Hours	CSE Department, JECC	2018	1	1.Define and demonstrate the use of built-in data structures "lists" and "dictionary". 2.Design and implement a program to solve a real world problem. 3.Design and implement GUI application and how to handle exceptions and files. 4.Make database connectivity in python programming language.
3	Android With MIT App Inventor	35 Hours	MR Department, JECC	2018-19 Odd	1	1. Design a mobile app 2. Developing Android Apps in MIT App Inventor

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					3.Mathematical formulas in android app development
4	Full Stack developer (Basics of Web Programming)	35 Hours	CSE Department, JECC	2019	1	1.Develop interactive Web pages using HTML. 2.Present a professional document using Cascaded Style Sheets. 3.Understand and practice web page designing techniques 4.Understand and practice embedded dynamic scripting on client side Internet Programming.
5	PCB Fabrication	34Hours	EEE Department, JECC	2018	1	1.Understand the steps involved in schematic, layout, fabrication and assembly process of PCB design. 2.Design (schematic and layout) PCB for analog circuits, digital circuits and mixed circuits. 3.Design (schematic and layout) and fabricate PCB for simple circuits.
6	Document Preparation Using LaTeX	35Hours	EEE Department, JECC	2019	1	1. Describes the development process of TeX and LaTeX. 2. Explains the difference between TeX and LaTeX. 3. Tells the advantages of LaTeX over other more traditional softwares.
7	INTRODUCTION TO VHDL	34 HOUR	ECE Department, JECC	2018-2019(ODD)	1	1. Students Will be able to write VHDL code for simple digital hardware designs 2. Students Will be able to design and implement various combinational and sequential digital circuits using different

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						styles of modelling of VHDL. 3. Students Will be able to simulate and validate a digital design/logic using VHDL with the help of ModelSim/ Xilinx Software
8	ELECTRONICS CIRCUIT SIMULATION& PCB PRINTING	35	ECE Department, JECC	2018-19(EV EN)	1	1.Student will be able to design and simulate electronic circuit suing EDA tool. 2.Student will be able to design single sided PCB using EDA tool. Student will be able to print PCB using toner transfer method.
9	Add on Course on Matlab	30	MR Department, JECC	2018-19(EV EN)	1	1.Students will develop programming skills and technique to solve mathematical problems. 2. Students will use graphic features of MATLAB will be able to use this feature effectively in the various applications. 3. Students will be able to use MATLAB as a simulation tool. 4. Students will be able to work as a 'MATLAB programmer' in the industry.
10	Total station Training	35 hour	CE Department, JECC	2018	1	1. Use and operate Theodelite in the field. 2. Apply the knowledge of Theodolite in different operations in civil engineering projects. 3. Use total station in the fireld of civil engineering land survey.
11	NPTEL			2018	1	

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2017-18

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1	BEC	1 Year	EFLI	2017	1	1. Develop basic skills to deal with people in business situations. 2. Increase their knowledge of key business concepts worldwide. 3. Write and read basic business reports, faxes, and memos. 4. Expand vocabulary related to general business situations.
2	Introduction to arduino	33 Hours	CSE Department, JECC	2017	1	1.Will Learn the basics of electronics, including reading schematics (electronics diagrams) 2. Learn how to prototype circuits with a breadboard 3.Learn the Arduino programming language and IDE 4. Program basic Arduino examples
3	Object-Oriented Programming using the Java programming language	33 Hours	CSE Department, JECC	2018	1	1. Use the syntax and semantics of java programming language and basic concepts of OOP. 2. Develop reusable programs using the concepts of inheritance, polymorphism, interfaces and packages. 3. Apply the concepts of Multithreading and Exception handling to develop efficient and error free codes. 4. Design event driven GUI and

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					web related applications which mimic the real word scenarios.
4	Document Preparation Using LaTeX	35 Hours	EEE Department, JECC	2017	1	1. Describes the development process of TeX and LaTeX. 2. Explains the difference between TeX and LaTeX. 3. Tells the advantages of LaTeX over other more traditional softwares.
5	Introduction to MATLAB	34 Hours	EEE Department, JECC	2018	1	1.Students will develop programming skills and technique to solve mathematical problems. 2. Students will use graphic features of MATLAB will be able to use this feature effectively in the various applications. 3. Students will be able to use MATLAB as a simulation tool. 4. Students will be able to work as a 'MATLAB programmer' in the industry.
6	Introduction to programming in MatLab	37 HOUR	ECE Department, JECC	2017	1	1.Students will develop programming skills and technique to solve mathematical problems. 2. Students will use graphic features of MATLAB will be able to use this feature effectively in the various applications. 3. Students will be able to use MATLAB as a simulation tool. 4. Students will be able to work as a 'MATLAB programmer' in the industry.

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7	Introduction to arduino	33 HOURS	ECE Department, JECC	2018	1	1.Will Learn the basics of electronics, including reading schematics (electronics diagrams) 2. Learn how to prototype circuits with a breadboard 3.Learn the Arduino programming language and IDE 4. Program basic Arduino examples
8	NPTEL					

2016-17

Sl. No.	Name of Add on /Certificate programs offered	Date & Duration of course	Agency conducted	Year of offering	No. of times offered during the same year	Course Outcome
1	BEC	1 Year	EFLI	2016	1	1. Develop basic skills to deal with people in business situations. 2. Increase their knowledge of key business concepts worldwide. 3. Write and read basic business reports, faxes, and memos. 4. Expand vocabulary related to general business situations.
2	C Programming	35 Hours	CSE Department, JECC	2016	1	1. use the fundamental programming constructs with clear understanding of their working 2. Think recursively to arrive at solutions and convert them to iterative programs if needed 3. Apply OOP concepts and apply them to model software

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						solutions.
3	Sheet Metal Design using SOLIDWORKS	40 hours	ME Department, JECC	2016	1	1.Demonstrate competency with multiple drawing and modification commands in SolidWorks. 2. Create three-dimensional solid models. 3. Create three-dimensional assemblies incorporating multiple solid models. 4. Apply industry standards in the preparation of technical mechanical drawings.
4	Object-Oriented Programming using the Java programming language	33 Hours	CSE Department, JECC	2017	1	1. Use the syntax and semantics of java programming language and basic concepts of OOP. 2. Develop reusable programs using the concepts of inheritance, polymorphism, interfaces and packages. 3. Apply the concepts of Multithreading and Exception handling to develop efficient and error free codes. 4. Design event driven GUI and web related applications which mimic the real word scenarios.
5	Total station Training	35 hour	CE Department, JECC	2016	1	1. Use and operate Theodelite in the field. 2. Apply the knowledge of Theodolite in different operations in civil engineering projects. 3. Use total station in the fireld of civil engineering land survey.
6	NPTEL					
2015-16						
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					during the same year	
1	BEC	1 Year	EFLI	2015	1	1. Develop basic skills to deal with people in business situations. 2. Increase their knowledge of key business concepts worldwide. 3. Write and read basic business reports, faxes, and memos. 4. Expand vocabulary related to general business situations.
2	Sheet Metal Design using SOLIDWORKS	40 hours	ME Department, JECC	2016	1	1. Demonstrate competency with multiple drawing and modification commands in SolidWorks. 2. Create three-dimensional solid models. 3. Create three-dimensional assemblies incorporating multiple solid models. 4. Apply industry standards in the preparation of technical mechanical drawings.
3	Python Programming	35 hours	CSE Department, JECC	2015	1	1. Define and demonstrate the use of built-in data structures "lists" and "dictionary". 2. Design and implement a program to solve a real world problem. 3. Design and implement GUI application and how to handle exceptions and files. 4. Make database connectivity in python programming language.
4	Full Stack developer (Basics of Web Programming)	35 hours	CSE Department, JECC	2016	1	1. Develop interactive Web pages using HTML. 2. Present a professional

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						document using Cascaded Style Sheets. 3.Understand and practice web page designing techniques 4.Understand and practice embedded dynamic scripting on client side Internet Programming.

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