



Maharaja Institute of Technology Thandavapura
Department of Computer Science and Engineering
 (Approved by AICTE, New Delhi and Affiliated to VTU, Belagavi)
 (Recognized by GoK and Certified by ISO 9001:2015 & ISO 21008:2018)



MIT THANDAVAPURA
 2000, THANDAVAPURA, BELAGAVI, KARNATAKA

Date: 08/06/2022

Course Outcome

Subject: Problem Solving through Programming Subject Code: 21PSP13/23

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C112.1	Demonstrate the basic architecture and functionalities of a computer and identify the hardware parts	L3
C112.2	Apply programming constructs of C language using Branching and Conditional statements to solve the real-world problem	L3
C112.3	Interpret the user-defined data structures like arrays in implementing solutions to problems like searching and sorting	L4
C112.4	Analyze user-defined data structures like functions in implementing solutions	L4
C112.5	Design the solutions to problems using modular programming constructs using Structures, Unions and Pointers	L5

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11		12	
C112.1	3	-	-	-	-	-	-	-	-	-	-	-	1	2
C112.2	-	3	-	-	-	-	-	-	-	-	-	-	3	3
C112.3	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C112.4	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C112.5	-	-	3	-	-	-	-	-	-	-	-	-	-	-
CO Average	3	3	3	3	-	-	-	-	-	-	-	-	3	3

[Signature]
 Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on

Heth.c	<i>[Signature]</i>	<i>[Signature]</i>
Criterion 3 Coordinator	NBA coordinator	HOD
<i>[Signature]</i>		<i>[Signature]</i>
Convener		Principal



Maharaja Institute of Technology Thandavapura
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Department of Computer Science and Engineering



MIT THANDAVAPURA
COMPUTER SCIENCE AND ENGINEERING

Date: 20/09/2024

Course Outcome

Subject: Principles of programming using C

Subject Code: BPOPS103/203

CO's	DESCRIPTION OF THE OUTCOMES	RBT Levels
C103.1	Demonstrate the basic architecture and functionalities of a computer and also identify the hardware parts	L2
C103.2	Apply programming constructs of C language using Branching and Conditional statements to solve the real world problem	L3
C103.3	Interpret the user-defined data structures like arrays and functions in implementing solutions to problems like searching and sorting	L3
C103.4	Analyze user-defined data structures like Strings and Pointers in implementing solutions	L4
C103.5	Design the solutions to problems using modular programming constructs using Structures, Unions and Files	L6

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C103.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C103.2	-	3	-	-	-	-	-	-	-	-	-	3	3	-
C103.3	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C103.4	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C103.5	-	-	3	-	3	-	-	-	-	-	-	-	-	-
CO Average	3	3	3	3	3	-	-	-	-	-	-	3	3	3

[Signature]
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

Hetz.c	<i>[Signature]</i>	
Criterion 3 Coordinator	NBA coordinator	HOD
<i>[Signature]</i>		<i>[Signature]</i>
Convener		Principal





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Department of Computer Science and Engineering



MIT THANDAVAPURA
COMPUTER SCIENCE AND ENGINEERING

Date: 15/10/2022

Course Outcome

Subject: Data Structures and Applications Subject Code: 21CS32

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C202.1	Explain different data structures and their applications.	L3
C202.2	Deduce problems using stack and queues.	L3
C202.3	Outline applications of linked list.	L4
C202.4	Summarize the applications of trees and graphs to model and solve the real-world problems.	L5
C202.5	Compose Hashing techniques and resolve collisions during mapping of key value pairs.	L6

CO No	Program Outcomes										PSO			
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C202.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C202.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C202.3	-	-	3	-	-	-	-	-	-	-	-	-	-	-
C202.4	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C202.5	-	-	-	-	3	-	-	-	-	-	-	3	3	3
CO Average	3.00	3.00	3.00	3.00	3.00	-	-	-	-	-	-	3.00	3.00	3.00

Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

H.G.F.C	Subair	
Criterion 3 Coordinator	NBA coordinator	HOD
Convener		Principal





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Date: 15/10/22

Course Outcome

Subject: Analog and Digital Electronics	Subject Code: 21CS33
CO's	DESCRIPTION OF THE OUTCOMES
C203.1	Explain the use of photo electronics devices, 555 timer IC, Regulator ICs and uA741, Analog-to-Digital and Digital-to-Analog conversion techniques.
C203.2	Make use of simplifying techniques in the design of combinational circuits.
C203.3	Illustrate combinational and sequential digital circuits
C203.4	Demonstrate the use of flip flops and apply for registers and also develop simple VHDL Programs.
C203.5	Explain the data transfers between the registers and Design and test counters
	Levels
	L2
	L3
	L4
	L6
	L6

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C203.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C203.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C203.3	-	-	3	-	-	-	-	-	-	-	-	-	-	-
C203.4	-	-	-	-	3	-	-	-	-	-	-	3	3	-
C203.5	-	-	-	3	-	-	-	-	-	-	-	3	3	-
CO Average	3	3	3	3	3	-	-	-	-	-	-	3	3	-

Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

H.S.K.C	S. S. S.	
Criterion 3 Coordinator	NBA coordinator	HOD
Convener		Principal



Date: 15/10/2022

Course Outcome

Subject: Computer Organization and Architecture

Subject Code: 21CS34

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C204.1	Explain the organization and architecture of computer systems with machine instructions and programs.	L2
C204.2	Demonstrate the input/output devices communicating with computer system.	L3
C204.3	Demonstrate the functions of different types of memory devices .	L3
C204.4	Apply different data types on simple arithmetic and logical unit.	L3
C204.5	Analyze the functions of basic processing unit, Parallel processing and pipelining.	L4

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C204.1	3	-	-	-	-	-	-	-	-	-	-	-	2	-
C204.2	-	-	-	-	3	-	-	-	-	-	-	-	-	-
C204.3	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C204.4	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C204.5	-	-	3	-	-	-	-	-	-	-	-	-	-	-
CO Average	3	3	3	3	3	-	-	-	-	-	-	-	2	-

Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

H.S.P.C	Sulini	
Criterion 3 Coordinator	NBA coordinator	HOD
Convener		Principal



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Department of Computer Science and Engineering



MIT THANDAVAPURA
 COMPUTER SCIENCE AND ENGINEERING

Date: 15/10/22

Course Outcome

Subject: Object Oriented with Java Laboratory

Subject Code: 21CSL35

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C205.1	Use Eclipse IDE to design, develop, debug java projects	L3
C205.2	Analyze the necessity for object oriented programming paradigm over structured programming and become familiar with the fundamental concepts in OOP	L4
C205.3	Design and develop java programs, analyze and interpret object oriented data and documents results	L5
C205.4	Develop multiprogramming exception/event handling, abstraction to develop robust programs	L5
C205.5	Develop user friendly applications using File I/O and GUI concepts	L5

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C205.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C205.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C205.3	-	-	3	-	-	-	-	-	-	-	-	-	-	-
C205.4	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C205.5	-	-	-	-	3	-	-	-	-	-	-	3	3	3
CO Average	3	3	3	3	3	-	-	-	-	-	-	3	3	3

HGF.C
 Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

HGF.C	Schultz	
Criterion 3 Coordinator	NBA coordinator	HOD
Convener		Principal





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Department of Computer Science and Engineering



MIT THANDAVAPURA
COMPUTER SCIENCE AND ENGINEERING

Date: 15/10/22

Course Outcome

Subject: Social Connect and Responsibility

Subject Code: 21SCR36

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C205.1	Analyze the needs and problems of the community and involve them in problem solving	L4
C205.2	Develop among themselves a sense of social & civic responsibility & utilize their knowledge in finding practical solutions to individual and community problems.	L5
C205.3	Develop competence required for group-living and sharing of responsibilities & gain skills in mobilizing community participation to acquire leadership qualities and democratic attitudes.	L5

CO No	Program Outcomes												PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	
C205.1	-	-	-	-	-	3	3	-	3	3	-	-	-	-	-
C205.2	-	-	-	-	-	3	3	-	3	3	-	-	-	-	-
C205.3	-	-	-	-	-	3	3	-	3	3	-	-	-	-	-
CO	-	-	-	-	-	3	3	-	3	3	-	-	-	-	-
Average															

Ranjith
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

<i>HJF.c</i>	<i>Sobit</i>	
Criterion 3 Coordinator	NBA coordinator	HOD
<i>[Signature]</i>		<i>[Signature]</i>
Convener		Principal





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Department of Computer Science and Engineering



MIT THANDAVAPURA
 COMPUTED SCIENCE AND ENGINEERING

Date: 15/10/22

Course Outcome

Subject: Mastering Office

Subject Code: 21CSL381

CO's	DESCRIPTION OF THE OUTCOMES	RBT Levels
C208.1	Describe the basics of computers and prepare documents, spreadsheets, make small presentations with audio, video and graphs and would be acquainted with internet.	L2
C208.2	Demonstrate the ability to apply application software in an office environment.	L3
C208.3	Use Google Suite for office data management tasks	L3
C208.4	Illustrate the knowledge about spreadsheet with formula, macros spell checker etc	L4
C208.5	Create, edit, save and print documents with list tables, header, footer, graphic, spellchecker, mail merge and grammar checker	L6

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C208.1	-	-	-	-	3	-	-	-	2	-	-	-	-	2
C208.2	-	-	3	-	-	-	-	-	-	-	-	-	-	-
C208.3	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C208.4	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C208.5	-	3	-	-	-	-	-	-	-	-	-	-	-	-
CO Average	3	3	3	3	3	-	-	-	2	-	-	-	-	2

[Signature]
 Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

H.T.F.C	<i>[Signature]</i>	
Criterion 3 Coordinator	NBA coordinator	HOD
<i>[Signature]</i>		<i>[Signature]</i>
Convener		Principal





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MIT THANDAVAPURA
COMPUTER SCIENCE AND ENGINEERING

Date: 22/05/23

Course Outcome



Subject: Design and Analysis of Algorithms **Subject Code:** 21CS42

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C210.1	Analyze the performance of the algorithms, state the efficiency using asymptotic notations and analyze mathematically the complexity of the algorithm.	L4
C210.2	Apply divide and conquer approaches and decrease and conquer approaches in solving the problems analyze the same	L3
C210.3	Apply the appropriate algorithmic design technique like greedy method, transform and conquer approaches and compare the efficiency of algorithms to solve the given problem.	L3
C210.4	Apply and analyze dynamic programming approaches to solve some problems. And improve algorithm time efficiency by sacrificing space.	L4
C210.5	Apply and analyze backtracking, branch and bound methods and to describe P, NP and NP-Complete problems.	L4

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C210.1	3	3	-	-	-	-	-	-	-	-	-	-	-	-
C210.2	-	3	3	-	-	-	-	-	-	-	-	-	-	-
C210.3	-	3	3	-	-	-	-	-	-	-	-	-	-	-
C210.4	-	-	-	3	3	-	-	-	-	-	-	3	3	-
C210.5	-	-	-	-	3	-	-	-	-	-	-	3	3	-
CO	3	3	3	3	3	-	-	-	-	-	-	3	3	-
Average														


Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

H.A.T.C	Sulais	
Criterion 3 Coordinator	NBA coordinator	HOD
		
Convener		Principal





Maharaja Institute of Technology Thandavapura
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Department of Computer Science and Engineering



MIT THANDAVAPURA
 CENTER FOR SCIENCE AND TECHNOLOGY

Date: 22/05/23

Course Outcome

Subject: Microcontroller and Embedded Systems

Subject Code: 21CS43

CO's	DESCRIPTION OF THE OUTCOMES	RBT Levels
C211.1	Illustrate the ARM microcontroller's architectural features and program module.	L3
C211.2	Apply the knowledge gained from programming on ARM to different applications	L3
C211.3	Analyze the C-Compiler and interfacing external devices.	L4
C211.4	Interface the basic hardware components and their selection method based on characteristics of Embedded Systems.	L5
C211.5	Demonstrate the need for a real-time operating system for embedded system applications.	L6

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C211.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C211.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C211.3	-	-	3	-	-	-	-	-	-	-	-	-	-	-
C211.4	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C211.5	-	-	-	-	3	3	-	-	-	-	-	-	3	3
CO Average	3	3	3	3	3	3	-	-	-	-	-	-	3	3

Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

H.J.F.C	S. S. S.	
Criterion 3 Coordinator	NBA coordinator	HOD
Convener		Principal





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Department of Computer Science and Engineering



MIT THANDAVAPUR
COMPUTER SCIENCE AND ENGINEERING

Date: 20/5/23

Course Outcome

Subject: Operating System

Subject Code: 21CS44

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C212.1	Explain the services, functions and structure of operating system.	L3
C212.2	Demonstrate an appropriate CPU scheduling algorithms and the various techniques for process synchronization.	L3
C212.3	Analyze the various techniques for deadlock handling.	L4
C212.4	Illustrate the various techniques for memory management and file management strategies.	L4
C212.5	Summarize secondary storage management strategies and Customized Case study	L4

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C212.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C212.2	-	3	-	-	-	-	-	-	-	-	-	2	-	-
C212.3	-	-	2	-	-	-	-	-	-	-	-	2	-	-
C212.4	-	-	-	2	-	-	-	-	-	-	-	2	-	-
C212.5	-	-	-	-	-	-	-	-	-	-	-	2	2	2
CO Average	3	3	2	2	-	-	-	-	-	-	-	2	2	2

Ravi Shankar
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

<i>H.S.K.C</i>	<i>S. S. S.</i>	
Criterion 3 Coordinator	NBA coordinator	HOD
<i>[Signature]</i>		<i>[Signature]</i>
Convener		Principal





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Department of Computer Science and Engineering



MIT THANDAVAPURA
COMPUTER SCIENCE AND ENGINEERING

Date: 22/5/23

Course Outcome

Subject: Python Programming Laboratory

Subject Code: 21CSL46

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C214.1	Apply the proficiency in handling loops and creation of functions.	L3
C214.2	Compute the methods to create and manipulate lists, tuples and dictionaries	L3
C214.3	Analyze the operations involving using regular expressions and file system	L3
C214.4	Inspect the concepts of object-oriented programming as used in Python	L5
C214.5	Develop websites working with PDF,JSON and other file formats.	L5

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C214.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C214.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C214.3	-	-	3	-	-	-	-	-	-	-	-	-	-	-
C214.4	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C214.5	-	-	-	-	3	-	-	-	-	-	-	3	3	3
CO Average	3	3	3	3	3	-	-	-	-	-	-	3	3	3

H.M.R.C
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

H.M.R.C	Schaefer	Rawjith
Criterion 3 Coordinator	NBA coordinator	HOD
Convener		Principal





Maharaja Institute of Technology Thandavapura
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Department of Computer Science and Engineering



Date: 24/5/23

Course Outcome

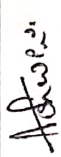
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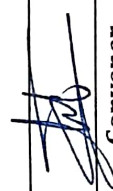
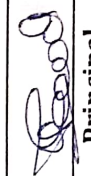
Subject Code: 21CSL481

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C216.1	Describe the fundamentals of web and the concept of HTML.	L3
C216.2	Use the concepts of HTML, XHTML to construct the web pages.	L3
C216.3	Interpret CSS for dynamic documents.	L3
C216.4	Evaluate different concepts of JavaScript & Construct dynamic documents.	L4
C216.5	Design a small project with JavaScript and XHTML	L4

CO No	Program Outcomes												PSO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C216.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C216.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C216.3	-	-	3	-	-	-	-	-	-	-	-	-	-	-
C216.4	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C216.5	-	-	-	-	3	-	-	3	3	3	-	3	3	-
CO Average	3	3	3	3	3	-	-	3	3	3	-	3	3	-

Approval of the COs and their mapping with POs and PSOs was given on
/ /


Course Coordinator

H.T.K.C	S. Subis	
Criterion 3 Coordinator	NBA coordinator	HOD
 Convener		 Principal





Maharaja Institute of Technology Thandavapuram
(Approved by AICTE, New Delhi and Affiliated to VTU, Belagavi)
Department of Computer Science and Engineering



MIT THANDAVAPURAM
COMPUTER SCIENCE AND ENGINEERING

Date: 22/5/23

Course Outcome

Subject: Internship

Subject Code: 21INT49

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C218.1	Demonstrate the technical knowledge and skills acquired during the academic studies in real-world projects.	L3
C218.2	Exhibit the proficiency in using relevant software, programming languages, tools, and equipment specific to the field of study.	L3
C218.3	Focus, organize, and execute tasks such as managing multiple assignments and setting priorities within specified timelines.	L4
C218.4	Persuade and collaborate effectively in multidisciplinary teams, fostering teamwork and interpersonal skills emphasizing the ability to work harmoniously with colleagues from various backgrounds and areas of expertise.	L5
C218.5	Validate their professional communication skills, both written and verbal to effectively convey technical information with colleagues, clients, and supervisors.	L6

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C218.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C218.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C218.3	-	-	3	-	-	-	-	-	-	-	-	-	-	-
C218.4	-	-	-	3	3	3	3	3	3	-	3	-	3	-
C218.5	-	-	-	-	-	-	-	-	-	3	-	3	-	3
CO Average	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Selvar
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

H.T.F.C	<i>Selvar</i>	
Criterion 3 Coordinator	NBA coordinator	HOD
<i>[Signature]</i> Convener		<i>[Signature]</i> Principal





Maharaja Institute of Technology Thandavapura
 (Approved by AICTE, New Delhi and Affiliated to VTU, Belagavi)
Department of Computer Science and Engineering



MIT THANDAVAPURA
 DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 27/09/22

Course Outcome

Subject: Management and Entrepreneurship for IT Industry

Subject Code: 18CS51

CO's	DESCRIPTION OF THE OUTCOMES	RBT Levels
C301.1	Describe Management, Organization, planning and staffing.	L2
C301.2	Explain on Directing, communication, coordination and controlling.	L3
C301.3	Outline the importance of entrepreneurship.	L4
C301.4	Illustrate the resources available effectively through ERP.	L4
C301.5	Illustrate use of IRPs and Institutional support in entrepreneurship.	L4

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C301.1	-	-	-	-	-	-	-	-	3	-	-	-	-	3
C301.2	-	-	-	-	-	-	-	-	-	3	-	-	-	-
C301.3	-	3	-	-	-	-	-	3	-	-	-	-	-	-
C301.4	3	-	-	-	-	-	-	-	-	-	3	-	-	-
C301.5	-	-	3	-	-	-	-	-	-	-	-	-	-	-
CO Average	3	3	3	-	-	-	-	3	3	3	3	-	-	3

Abhy . ety
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

<i>H.T.R.C</i> Criterion 3 Coordinator	<i>Selva</i> NBA coordinator	<i>Ranjith</i> HOD
<i>[Signature]</i> Convener	<i>[Signature]</i> Principal	



Maharaja Institute of Technology Thandavapura
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Department of Computer Science and Engineering



Date: 27/07/22

Course Outcome

Subject: COMPUTER NETWORKS AND SECURITY

Subject Code: 18CS52

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C302.1	Explain the principles of application layer protocols.	L3
C302.2	Recognize transport layer service and infer UDP and TCP protocols.	L3
C302.3	Classify routers, IP and Routing Algorithms in network layer.	L3
C302.4	Explain the concepts of Network security and cryptography protocols.	L3
C302.5	Describe Multimedia Networking and Network Management.	L3

CO No	Program Outcomes										PSO			
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C302.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C302.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C302.3	-	-	3	-	-	-	-	-	-	-	-	-	-	3
C302.4	-	-	-	3	-	-	-	-	-	-	-	3	3	3
C302.5	-	-	-	-	-	-	-	-	-	-	-	3	3	3
CO Average	3	3	3	3	-	-	-	-	-	-	-	3	3	3

Aswini
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

<i>H.M.R.C</i>	<i>Sulaviz</i>	
Criterion 3 Coordinator	NBA coordinator	HOD
<i>[Signature]</i>		<i>[Signature]</i>
Convener		Principal

	<i>Ravijit</i>	
	HOD	
	<i>[Signature]</i>	
	Principal	





Maharaja Institute of Technology Thandavapura
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Department of Computer Science and Engineering



MIT THANDAVAPURA
LEARN TO SURVIVE AND THRIVE

Date: 27/09/22

Course Outcome

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS	Subject Code: I8CS53
C303.1	Apply the basic concepts of data model and entity-relationship model	L3	
C303.2	Implement SQL queries using relational model concepts	L3	
C303.3	Develop applications to interact with databases	L5	
C303.4	Design various normalization techniques	L5	
C303.5	Design various advance SQL queries related to transaction processing and locking using concurrency	L5	

CO No	Program Outcomes												PSO		
	1	2	3	4	5	6	7	8	9	10	11	12		1	2
C303.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C303.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C303.3	-	-	3	-	-	-	-	-	-	-	-	-	-	3	3
C303.4	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-
C303.5	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-
CO Average	3	3	3	3	-	-	-	-	-	-	-	-	3	3	3

H.T.P.C
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /	
H.T.P.C Criterion 3 Coordinator	Selvin NBA coordinator
 Convener	 HOD
	 Principal





Maharaja Institute of Technology Thandavapura
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Department of Computer Science and Engineering



MIT THANDAVAPURA

Date: 27/07/2024

Course Outcome

Subject: Automata Theory and Computability

Subject Code: 18CS54

CO's	DESCRIPTION OF THE OUTCOMES	Level
C304.1	Apply core concepts in Automata and Theory of Computation.	L3
C304.2	Identify different Formal language Classes and their Relationships.	L4
C304.3	Analyze Grammars and Recognizers for different formal languages.	L4
C304.4	Prove or disprove theorems in automata theory using their properties.	L4
C304.5	Determine the decidability and intractability of Computational problems.	L4

CO No	Program Outcomes												PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	
C304.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C304.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C304.3	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
C304.4	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-
C304.5	-	-	-	2	-	-	-	-	-	-	-	-	-	2	-
CO Average	3.00	3.00	2.00	2.00	-	-	-	-	-	-	-	-	-	-	2.00

Sulava
 Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on 1/1

H.T.C	Sulava	
Criterion 3 Coordinator	NBA coordinator	HOD
Convener		Principal





Maharaja Institute of Technology Thandavapura
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Department of Computer Science and Engineering



MIT THANDAVAPURA
 DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 27/9/22

Course Outcome

Subject: APPLICATION DEVELOPMENT USING PYTHON

Subject Code: 18CS55

CO's	DESCRIPTION OF THE OUTCOMES	RBT Levels
C305.1	Learn the syntax and semantics of Python programming language.	L2
C305.2	Illustrate the process of structuring the data using lists, tuples, strings and dictionaries.	L3
C305.3	Demonstrate the use of Regular Expression and built-in functions to navigate the file system.	L4
C305.4	Implement the Object-Oriented Programming concepts in Python.	L4
C305.5	Appraise the need for working with various documents like Excel, PDF, Word and Web scrapping	L5

CO No	Program Outcomes										PSO		
	1	2	3	4	5	6	7	8	9	10		11	12
C305.1	3	2	3	-	2	-	-	-	-	-	-	2	2
C305.2	3	3	3	-	2	-	-	-	-	-	-	2	2
C305.3	3	3	3	-	2	-	-	-	-	-	-	2	2
C305.4	3	2	2	-	2	-	-	-	-	-	-	2	2
C305.5	3	3	3	-	2	-	-	-	-	-	-	3	2
Average	3.00	2.60	2.80	-	2.00	-	-	-	-	-	-	2.20	2.00

Rajitha
 Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

H.S.R.C	Suliza	Rajitha
Criterion 3 Coordinator	NBA coordinator	HOD
<i>[Signature]</i> Convener		<i>[Signature]</i> Principal





Maharaja Institute of Technology Thandavapur:
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Department of Computer Science and Engineering



MIT THANDAVAPURA
COMPUTER SCIENCE AND ENGINEERING

Date: 27/9/22

Course Outcome

Subject: UNIX Programming

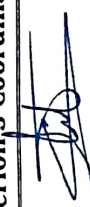

Subject Code: 18CS56

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C306.1	Interpret the features of Unix and basic Unix commands.	L3
C306.2	Illustrate shell programming and to write shell scripts.	L3
C306.3	Categorize, compare and make use of Unix system call.	L3
C306.4	Infer Unix API's and process control.	L3
C306.5	Construct an application/service over a Unix system.	L3

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C306.1	2	-	-	-	-	-	-	-	-	-	-	-	-	-
C306.2	-	3	2	-	-	-	-	-	-	-	-	-	-	-
C306.3	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C306.4	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C306.5	-	-	-	-	3	-	-	-	-	-	-	3	3	3
CO	2	3	2	3	3	-	-	-	-	-	-	3	3	3
Average														


Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

H.S.R.C	Schur's	
Criterion 3 Coordinator	NBA coordinator	HOD
		
Convener		Principal





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Department of Computer Science and Engineering



Date: 27/9/22

Course Outcome

Subject: COMPUTER NETWORK LABORATORY

Subject Code: 18CSL57

CO's	DESCRIPTION OF THE OUTCOMES	RBT Level
C307.1	Estimate the performance of Ethernet LAN and Wireless LAN through simulation.	L3
C307.2	Formulate the performance of GSM and CDMA model through simulation.	L3
C307.3	Design java programs for CRC and RSA algorithms.	L3
C307.4	Develop java programs for Bellman-ford and leaky bucket algorithms, socket programming using TCP and UDP.	L3

CO No	Program Outcomes												PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	
C307.1	3	-	-	3	3	-	-	-	-	-	-	-	-	-	-
C307.2	-	3	-	3	3	-	-	-	-	-	-	-	-	-	-
C307.3	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C307.4	-	-	3	-	-	-	-	-	-	-	-	-	3	-	-
CO Average	3	3	3	3	3	-	-	-	-	-	-	-	3	3	-

Ashwini
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

<i>H.S.F.C</i> Criterion 3 Coordinator	<i>S. S. S.</i> NBA coordinator	<i>Ravi</i> HOD
<i>[Signature]</i> Convener		<i>[Signature]</i> Principal





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Department of Computer Science and Engineering



MIT THANDAVAPURA
COMPUTER SCIENCE AND ENGINEERING

Date: 27-09-22

Course Outcome

Subject: DBMS Lab with Mini-Project

Subject Code: 18CSL58

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C308.1	Use Structured Query Language for database creation and manipulation	L3
C308.2	Analyze the working of different concepts of DBMS	L4
C308.3	Construct a database by using data definition, data manipulation and control languages	L5
C308.4	Implement and test the project developed for an application	L5

CO No	Program Outcomes										PSO				
	1	2	3	4	5	6	7	8	9	10		11	12	1	2
C308.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C308.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C308.3	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C308.4	-	-	-	3	3	-	-	3	3	3	3	3	3	3	3
CO Average	3	3	3	3	3	-	-	3	3	3	3	3	3	3	3

H.T.F.C
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on

H.T.F.C	Schuliz	
Criterion 3 Coordinator	NBA coordinator	HOD
Convener		Principal





Maharaja Institute of Technology Thandavapura
(Approved by AICTE, New Delhi and Affiliated to VTU, Belagavi)
Department of Computer Science and Engineering



MIT THANDAVAPURA
Center of Studies and Publications

Date: 13/09/2023

Course Outcome

Subject: System Software and Compilers

Subject Code: 18CS61

CO's	DESCRIPTION OF THE OUTCOMES	Level
C310.1	Explain the basics of System software.	L3
C310.2	Experiment with the knowledge of compilers and develop lexical analyzers.	L4
C310.3	Illustrate different types of parsers for grammars.	L4
C310.4	Illustrate lex and yacc tools for implementing different concepts of system software.	L4
C310.5	Utilize the knowledge of synthesis phase and analyze the correlation between syntax tree and code generation.	L4

CO No	Program Outcomes										PSO			
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C310.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C310.2	-	2	-	-	-	-	-	-	-	-	-	-	-	-
C310.3	-	-	2	-	-	-	-	-	-	-	-	-	-	-
C310.4	-	-	-	-	3	-	-	-	-	-	-	-	-	-
C310.5	-	-	-	2	-	-	-	-	-	-	-	2	2	2
CO Average	3	2	2	2	3	-	-	-	-	-	-	2	2	2

Scholar
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

H.T.F.C	Scholar	
Criterion 3 Coordinator	NBA coordinator	HOD
Convener		Principal





Maharaja Institute of Technology Thandavapura
(Approved by AICTE, New Delhi and Affiliated to VTU, Belagavi)
Department of Computer Science and Engineering



Date: 13/03/2023

Course Outcome

Subject: Computer Graphics and Visualization Subject Code: 18CS62

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C311.1	Design and implement algorithms for 2D graphics primitives and attributes.	L3
C311.2	Illustrate Geometric transformations on both 2D and 3D objects.	L3
C311.3	Correlate the concepts of clipping and Illumination Models.	L4
C311.4	Outline the concepts of visible surface detection in 2D and 3D viewing.	L4
C311.5	Compose solutions for problems and implement using suitable graphics tools.	L5

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C311.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C311.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C311.3	-	-	3	-	-	-	-	-	-	-	-	-	-	-
C311.4	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C311.5	-	-	-	-	3	-	-	-	-	-	-	3	3	-
CO Average	3	3	3	3	3	-	-	-	-	-	-	3	3	-

Shree
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

H.S.R.C	S. S. S. S.	
Criterion 3 Coordinator	NBA coordinator	HOD
<i>[Signature]</i>		<i>[Signature]</i>
Convener		Principal





Date: 12/03/2023

Course Outcome

Subject: WEB TECHNOLOGY AND ITS APPLICATIONS

Subject Code: 18CS66

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C312.1	Adopt HTML and CSS syntax and semantics to build web pages.	L3
C312.2	Construct and visually format tables and forms using HTML and CSS.	L3
C312.3	Develop client-side scripts using java Scripts and server-side scripts using PHP to generate and display the contents dynamically.	L3
C312.4	Appraise the principles of object oriented development using PHP.	L3
C312.5	Inspect java script Frame work like jQuery and backbone which facilitates developer to focus on core features.	L3

CO No	Program Outcomes												PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	
C312.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C312.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C312.3	-	3	-	-	3	-	-	-	-	-	-	-	3	3	3
C312.4	-	-	3	-	-	-	-	-	-	-	-	3	3	3	3
C312.5	-	-	-	3	-	-	-	-	-	-	-	3	3	3	3
CO Average	3	3	3	3	3	-	-	-	-	-	-	3	3	3	3

Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

Criterion 3 Coordinator	Convener	NBA coordinator	HOD
			Principal



Maharaja Institute of Technology Thandavapur
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Department of Computer Science and Engineering




Date: 13/03/2023

Course Outcome



Subject: Cloud Computing & its applications
 Subject Code: 18CS643

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C313.1	Translate the concepts and terminologies of cloud computing and virtualization.	L2
C313.2	Explain cloud frameworks and classify services of cloud computing	L3
C313.3	Illustrate architecture and programming in cloud	L3
C313.4	Describe computation and programming model involved for data intensive applications	L3
C314.5	Infer the platforms for development of cloud application and list the application of cloud	L3

CO No	Program Outcomes										PSO			
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C313.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C313.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C313.3	-	-	3	-	-	-	-	-	-	-	-	-	-	-
C313.4	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C314.5	-	-	-	-	3	-	-	-	-	-	-	3	3	3
CO	2	3	3	3	3	-	-	-	-	-	-	3	3	3
Average														


 Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

HSTF-C	Sulvi	
Criterion 3 Coordinator	NBA coordinator	HOD
		
Convener		Principal





Maharaja Institute of Technology Thandavapura
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Department of Computer Science and Engineering



MIT THANDAVAPURA
COMPUTER SCIENCE AND ENGINEERING

Date: 13/05/2023

Course Outcome

Subject: System Software Laboratory

Subject Code: 18CSL66

CO's	DESCRIPTION OF THE OUTCOMES	Level
C315.1	Construct LEX and YACC programs for lexical and syntax analysis phases of Compiler.	L3
C315.2	Correlate algorithms with code for top down and bottom-up parsing.	L4
C315.3	Devise the code for CPU scheduling and generating machine code using triples.	L4
C315.4	Recommend optimized C code for deadlock handling and page replacement algorithms.	L5

CO No	Program Outcomes										PSO			
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C315.1	3	-	-	-	3	-	-	-	-	-	-	-	-	-
C315.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C315.3	-	-	3	-	-	-	-	-	-	-	-	-	-	-
C315.4	-	-	-	2	-	-	-	-	-	-	-	2	2	2
CO Average	3	3	3	2	3	-	-	-	-	-	-	2	2	2

Selvaraj
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

H.T.F.C	<i>Selvaraj</i>	
Criterion 3 Coordinator	NBA coordinator	HOD
<i>[Signature]</i>		<i>[Signature]</i>
Convener		Principal





Maharaja Institute of Technology Thandavapura
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Department of Computer Science and Engineering



MIT THANDAVAPURA
Computer Science and Engineering

Date: 13/03/2023

Course Outcome

Subject: Computer Graphics Laboratory with Mini-Project Subject Code: 18CSL67

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C316.1	Demonstrate simple algorithms using OpenGL Graphics Primitives and attributes.	L3
C316.2	Simulate line drawing and clipping algorithms using OpenGL functions	L3
C316.3	Outline the algorithms for geometric transformations of both 2D and 3D objects	L4
C316.4	Recommend methods to create mini software with different material objects and light effect techniques.	L5
C316.5	Develop GUI based graphics packages and games.	L6

CO No	Program Outcomes										PSO			
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C316.1	3	3	-	-	-	-	-	-	-	-	-	-	-	-
C316.2	-	-	3	-	-	-	-	-	-	-	-	-	-	-
C316.3	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C316.4	-	-	-	-	3	-	-	3	3	3	-	-	-	-
C316.5	-	-	-	-	-	-	-	-	-	-	3	3	3	-
CO Average	3.00	3.00	3.00	3.00	3.00	-	-	3.00	3.00	3.00	3.00	3.00	3.00	-

Bhehath
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

<i>HATTC</i>	<i>Selvi</i>	
Criterion 3 Coordinator	NBA coordinator	HOD
<i>[Signature]</i>		<i>[Signature]</i>
Convener		Principal





Maharaja Institute of Technology Thandavapura
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Department of Computer Science and Engineering



MIT THANDAVAPURA
 DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: / /

Course Outcome

Subject: Mobile Application Development

Subject Code: 18CSMP68

CO's	DESCRIPTION OF THE OUTCOMES	RBT Levels
C317.1	Demonstrate an application using Android development environment.	L2
C317.2	Experiment with the method of storing, sharing and retrieving the data in Android applications	L3
C317.3	Illustrate responsive user interface across wide range of devices.	L4
C317.4	Construct a mobile Application by using various components like activity, views, services, content providers and receivers.	L6

CO No	Program Outcomes										PSO			
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C317.1	3	-	-	-	-	-	-	-	-	-	3	3	-	3
C317.2	-	3	-	-	-	-	-	-	-	-	-	-	3	-
C317.3	-	-	3	-	-	-	-	-	-	-	-	-	-	-
C317.4	-	-	-	3	3	-	-	-	3	3	-	-	-	-
CO Average	3	3	3	3	3	-	-	-	3	3	3	3	3	3

[Signature]
 Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

<i>[Signature]</i> Criterion 3 Coordinator	<i>[Signature]</i> NBA coordinator	<i>[Signature]</i> HOD
<i>[Signature]</i> Convener	<i>[Signature]</i> Principal	





Maharaja Institute of Technology Thandavapura
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Department of Computer Science and Engineering



MIT THANDAVAPURA
COMPUTER SCIENCE AND ENGINEERING

Date: 6/9/22

Course Outcome

Subject: Artificial Intelligence and Machine Learning

Subject Code: 18CS71

CO's	DESCRIPTION OF THE OUTCOMES	Level
C401.1	Understand AI concepts to solve problems by applying suitable heuristic search techniques.	L2
C401.2	Understand the theory behind concept learning and its algorithms.	L2
C401.3	Analyze decision trees and artificial neural networks to solve appropriate problems.	L4
C401.4	Illustrate the working of Bayesian classification and Bayesian learning techniques.	L4
C401.5	Demonstrate the applications of AI and ML with instance-based and reinforcement learning.	L3

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C401.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C401.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C401.3	-	-	3	-	-	-	-	-	-	-	-	-	-	-
C401.4	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C401.5	-	-	-	-	3	-	-	-	-	-	-	3	3	3
CO Average	3	3	3	3	3	-	-	-	-	-	-	3	3	3

Schubert
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

H.S.R.c	Schubert	
Criterion 3 Coordinator	NBA coordinator	HOD
Convener		Principal





Maharaja Institute of Technology Thandavapura
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Department of Computer Science and Engineering



MIT THANDAVAPURA
COMPUTER SCIENCE AND ENGINEERING

Date: 06/09/22

Course Outcome

Subject: BIG DATA AND ANALYTICS

Subject Code: 18CS72

CO's	DESCRIPTION OF THE OUTCOMES	RBT levels
C402.1	Outline fundamentals of Big Data analytics.	L3
C402.2	Investigate Hadoop framework and Hadoop Distributed File system.	L3
C402.3	Illustrate the concepts of NoSQL using MongoDB and Cassandra for Big Data.	L3
C402.4	Demonstrate the Map Reduce programming model to process the big data along with Hadoop tools	L3
C402.5	Select machine Learning algorithms for real world big data, web contents and Social Networks to provide analytics with relevant visualization tools.	L3

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C402.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C402.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C402.3	-	-	3	-	-	-	-	-	-	-	-	-	-	-
C402.4	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C402.5	-	-	-	-	3	-	-	-	-	-	-	3	3	3
CO Average	3	3	3	3	3	-	-	-	-	-	-	3	3	3

Adwin
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

<i>HSTC</i> Criterion 3 Coordinator	<i>Saleem</i> NBA coordinator	<i>Ranjith</i> HOD
<i>[Signature]</i> Convener		<i>[Signature]</i> Principal





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Department of Computer Science and Engineering



MAHARAJA INSTITUTE OF TECHNOLOGY THANDAVAPURA
COMPUTER SCIENCE AND ENGINEERING

Date: 6/09/22

Course Outcome

Subject: User Interface Design

Subject Code: 18CS734

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C403.1	List fundamental logical standards, speculations and techniques for UI plan.	L3
C403.2	Practice the current accepted procedures for User Interface plan in a computerized configuration measure.	L3
C403.3	Devise a screen-based application in agreement to contemporary standards, hypotheses, strategies and practices for UI plan.	L4
C403.4	Assess a screen-based model as per specified conditions.	L5
C403.5	Justify the characteristics of a UI plan and relate it to essential cooperation plan hypothesis.	L5

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C403.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C403.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C403.3	-	-	3	-	-	-	-	-	-	-	-	-	-	-
C403.4	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C403.5	-	-	-	-	-	-	-	-	-	-	-	3	3	-
CO Average	3.00	3.00	3.00	3.00	-	-	-	-	-	-	-	3.00	3.00	-

Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

H.U.F.C	Selvia	Ranjith
Criterion 3 Coordinator	NBA coordinator	HOD
Convener		Principal





Maharaja Institute of Technology Thandavapura
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Department of Computer Science and Engineering



MIT THANDAVAPURA
 Computer Science and Engineering

Date: 6/9/22

Course Outcome

Subject: DIGITAL IMAGE PROCESSING

Subject Code: 18CS741

CO's	DESCRIPTION OF THE OUTCOMES	RBT Levels
C404.1	Explain the fundamental concepts in image processing	L3
C404.2	Formulate techniques followed in image enhancements	L4
C404.3	Assess Image enhancements techniques in frequency domain and Transformation techniques.	L4
C404.4	Inspect and apply segmentation Techniques.	L4
C404.5	Select Compression techniques in Image Processing.	L4

CO No	Program Outcomes											PSO			
	1	2	3	4	5	6	7	8	9	10	11		12	1	2
C404.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C404.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C404.3	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C404.4	-	-	-	3	-	-	-	-	-	-	-	-	-	3	-
C404.5	-	-	-	-	3	-	-	-	-	-	-	-	-	-	3
CO Average	3.00	3.00	3.00	3.00	3.00	-	-	-	-	-	-	-	3.00	3.00	3.00

Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

H.T.F.C	Schur	Ranjith
Criterion 3 Coordinator	NBA coordinator	HOD
Gonvener		Principal





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Department of Computer Science and Engineering



MIT THANDAVAPURA
COMPUTER SCIENCE AND ENGINEERING

Date: 06/09/22

Course Outcome

Subject: Artificial Intelligence and Machine Learning Laboratory

Subject Code: 18CSL76

CO's	DESCRIPTION OF THE OUTCOMES	Level
C406.1	Apply suitable algorithms to solve real world problem and present the same.	L3
C406.2	Analyze the usage of appropriate computing and mathematical models to write machine learning & Artificial Intelligence algorithm.	L4
C406.3	Implement the machine learning & Artificial Intelligence algorithm using python tools for a given data set.	L5
C406.4	Evaluate machine learning & Artificial Intelligence algorithms to meet desired need and present them appropriately.	L5

CO No	Program Outcomes												PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	
C406.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C406.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C406.3	-	-	3	-	3	-	-	-	-	-	-	-	-	-	-
C406.4	-	-	-	2	-	-	-	-	-	-	-	3	3	3	3
CO Average	3	3	3	2	3	-	-	-	-	-	-	3	3	3	3

Schubert
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

<i>H.A.F.C</i>	<i>Schubert</i>	
Criterion 3 Coordinator	NBA coordinator	HOD
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
Convener		Principal





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Department of Computer Science and Engineering



MIT THANDAVAPURA
COMPUTER SCIENCE AND ENGINEERING

Date: 6/9/22

Course Outcome

Subject: Project Work Phase - 1

Subject Code: 18CSP77

CO's	DESCRIPTION OF THE OUTCOMES	RBT Levels
C407.1	Analyze complex problems and arrive at feasible solutions using analytical decision-making capability and critical thinking with literature review.	L4
C407.2	Develop skills to build and manage teams required to support project process (scheduling work, procuring parts and documenting expenditures and working within the confines of a deadline) effectively and efficiently.	L4
C407.3	Communicate technical information by means of written reports and presentation.	L5

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C407.1	3	3	-	-	-	-	-	-	-	-	-	-	-	-
C407.2	-	-	-	3	-	3	3	3	-	-	-	-	-	-
C407.3	-	-	-	-	-	-	-	-	3	3	3	3	3	3
CO Average	3	3	-	3	-	3	3	3	3	3	3	3	3	3

R. Jithu
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

<i>H.S.P.C</i>	<i>Sulain</i>	<i>Ranjith</i>
Criterion 3 Coordinator	NBA coordinator	HOD
<i>[Signature]</i>		<i>[Signature]</i>
Convener		Principal





Maharaja Institute of Technology Thandavapur:
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Department of Computer Science and Engineering



MIT THANDAVAPURA
COMPUTER SCIENCE AND ENGINEERING

Course Outcome

Date: 01/02/23

Subject: Internet of Things
Subject Code: 18CS81

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C408.1	Describe the impact and challenges posed by IOT networks leading to new architecture models	L2
C408.2	Apply the deployment of smart objects and technologies and connect them to a network.	L3
C408.3	Illustrate the role of IOT protocols for efficient network communication.	L3
C408.4	Analyze the need for data analytics and security in IOT.	L4
C408.5	Evaluate the different sensor technologies and applications of IOT in Industry.	L4

CO No	Program Outcomes										PSO			
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C408.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C408.2	-	2	-	-	-	-	-	-	-	-	-	-	-	-
C408.3	-	-	-	-	-	-	3	-	-	-	-	-	-	-
C408.4	-	-	-	3	-	-	-	-	-	-	-	-	-	-
C408.5	-	-	3	-	3	-	-	-	-	-	-	-	3	3
CO Average	3	2	3	3	3	-	3	-	-	-	-	-	3	3

Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

H.T.F.C		HOD
Criterion 3 Coordinator	NBA coordinator	
Convener		Principal





Maharaja Institute of Technology Thandavapura
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Department of Computer Science and Engineering



MIT THANDAVAPURA
 UNIVERSITY OF TECHNOLOGY AND ENGINEERING

Date: 1/2/23

Course Outcome

Subject: NoSQL Database

Subject Code: 18CS823

CO's	DESCRIPTION OF THE OUTCOMES	RBT Levels
C409.1	Explain different types of NoSQL Databases	L3
C409.2	Contrast RDBMS with different NoSQL databases.	L3
C409.3	Illustrate the performance tune of Key-Value Pair NoSQL databases.	L4
C409.4	Demonstrate the detailed architecture and performance tune of Document-oriented NoSQL databases.	L4
C409.5	Formulate the performance tune of Entry-Relation Pair NoSQL databases.	L5

CO No	Program Outcomes											PSO	
	1	2	3	4	5	6	7	8	9	10	11		12
C409.1	3	-	-	-	-	-	-	-	-	-	-	-	-
C409.2	-	3	-	-	-	-	-	-	-	-	-	-	-
C409.3	-	-	3	-	-	-	-	-	-	-	-	-	-
C409.4	-	-	-	3	-	-	-	-	-	-	-	-	-
C409.5	-	-	-	-	3	-	-	-	-	-	-	-	3
CO Average	3.00	3.00	3.00	3.00	3.00	-	-	-	-	-	-	-	3.00

Agg
 Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

H.K.F.C	Schubert	Ranjith
Criterion 3 Coordinator	NBA coordinator	HOD
<i>[Signature]</i>		<i>[Signature]</i>
Convener		Principal





Maharaja Institute of Technology Thandavapura
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Department of Computer Science and Engineering



MIT THANDAVAPURA
COMPUTER SCIENCE AND ENGINEERING

Date: 06/09/23

Course Outcome

Subject: Project Work Phase - 2

Subject Code: 18CSP83

CO's	DESCRIPTION OF THE OUTCOMES	RBT Levels
C410.1	Analyze complex problems and arrive at feasible solutions using analytical decision-making capability and critical thinking with literature review.	L4
C410.2	Develop skills to build and manage teams required to support project process (scheduling work, procuring parts and documenting expenditures and working within the confines of a deadline) effectively and efficiently.	L4
C410.3	Design, build and test electronic circuitry/system software for real life applications, by making comprehensive use of the technical knowledge gained from previous courses.	L5
C410.4	Communicate technical information by means of written reports and presentation.	L5

CO No	Program Outcomes												PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	
C410.1	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C410.2	-	-	-	3	-	3	3	3	-	-	-	-	-	-	-
C410.3	-	-	3	-	3	-	-	-	-	-	-	-	-	-	-
C410.4	-	-	-	-	-	-	-	-	3	3	3	3	3	3	3
CO Average	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

R. S. H. H.
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

<i>H. S. C.</i>	<i>R. S. H. H.</i>	
Criterion 3 Coordinator	NBA coordinator	HOD
<i>[Signature]</i>		<i>[Signature]</i>
Convener		Principal





Maharaja Institute of Technology Thandavapura
(Recognized by GoK and Certified by ISO 9001:2015 & ISO 21008:2018)
Department of Computer Science and Engineering



MIT THANDAVAPURA
Computer Science and Engineering

Date: 01/02/23

Course Outcome

Subject: Technical Seminar

Subject Code: 18CSS84

CO's	DESCRIPTION OF THE OUTCOMES	RBT levels
C411.1	Demonstrate technical skills by exploring a specific domain in-depth through gathering relevant information, critically analyze technical papers, articles, and other resources.	L3
C411.2	Explain the validity and reliability of information sources, assess different perspectives on a topic, and make well-informed judgments.	L3
C411.3	Focus on effective communication and deliver a well-prepared seminar within the given time constraints.	L4
C411.4	Defend to questions and critiques professionally, fostering a collaborative learning environment.	L5
C411.5	Validate their professional articulation skills effectively to convey technical information through written reports.	L6

CO's	Program Outcomes												PSO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C411.1	3	3	-	-	-	-	-	-	-	-	-	-	-	-
C411.2	-	-	3	3	-	-	-	-	-	-	-	-	-	3
C411.3	-	-	-	-	-	-	-	-	-	3	-	-	-	-
C411.4	-	-	-	-	-	-	-	-	3	-	-	-	-	-
C411.5	-	-	-	-	-	-	-	-	-	-	-	3	3	-
CO Average	3	3	3	3	-	-	-	-	3	3	-	3	3	3

Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

Criterion 3 Coordinator		NBA coordinator	HOD
Convener			Principal





Maharaja Institute of Technology Thandavapur
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Department of Computer Science and Engineering



MIT THANDAVAPURA
Creating the Future. Now and Always.

Date: 01/02/23

Course Outcome

Subject: Internship

Subject Code: 18CSI85

CO's	DESCRIPTION OF THE OUTCOMES	RBT LEVELS
C412.1	Demonstrate the technical knowledge and skills acquired during the academic studies in real-world projects.	L3
C412.2	Exhibit the proficiency in using relevant software, programming languages, tools, and equipment specific to the field of study.	L3
C412.3	Focus, organize, and execute tasks such as managing multiple assignments and setting priorities within specified timelines.	L4
C412.4	Persuade and collaborate effectively in multidisciplinary teams, fostering teamwork and interpersonal skills emphasizing the ability to work harmoniously with colleagues from various backgrounds and areas of expertise.	L5
C412.5	Validate their professional communication skills, both written and verbal to effectively convey technical information with colleagues, clients, and supervisors.	L6

CO No	Program Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C412.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
C412.2	-	3	-	-	-	-	-	-	-	-	-	-	-	-
C412.3	-	-	3	-	-	-	-	-	-	-	-	-	-	-
C412.4	-	-	-	3	3	3	3	3	3	-	3	-	3	-
C412.5	-	-	-	-	-	-	-	-	-	3	-	3	-	3
CO Average	3	3	3	3	3	3	3	3	3	3	3	3	3	3

S. S. S.
Course Coordinator

Approval of the COs and their mapping with POs and PSOs was given on / /

<i>H. S. K. C.</i>	<i>S. S. S.</i>	<i>R. S. J. K. N.</i>
Criterion 3 Coordinator	NBA coordinator	HOD
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
Convener		Principal

