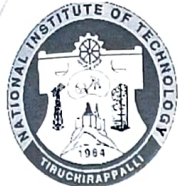




NATIONAL INSTITUTE OF TECHNOLOGY
TIRUCHIRAPPALLI

DEPARTMENT OF MATHEMATICS

COURSE PLAN – PART I			
Name of the programme and specialization	M.Sc., Mathematics		
Course Title	Programming in C-LAB		
Course Code	MA 711	No. of Credits	02
Course Code of Pre-requisite subject(s)	NIL		
Session	July, 2022	Section (if, applicable)	
Name of Faculty	Prakrati Kushwah	Department	Mathematics
Email	Kprakrati1256@gmail.com	Telephone No.	(+91) 9718466186
Name of Course Coordinator(s) (if, applicable)	Dr. N. Shivaranjani		
E-mail	ranjani@nitt.edu	Telephone No.	(+91) 9159177345
Course Type	<input checked="" type="checkbox"/> Core Course <input type="checkbox"/> Elective Course		
Syllabus (approved in BoS)			
Implementing the concepts of programming language C: Basics, operators, Loop operations, Arrays, Math Functions and I/O Functions, Functions, Functions and Recursion, Structures, File operations using command line arguments			
ESSENTIAL READINGS : (Textbooks, reference books etc.)			
1. B. S. Gottfried & J. K. Chhabra, Programming with C, Second Edition, Tata McGraw-Hill, New Delhi, 2006. 2. B.W. Kernighan & D. M. Ritchie, The C Programming Language, Second Edition, Prentice Hall of India Pvt. Limited, New Delhi, 2006. 3. V. Rajaraman, Computer Programming in C, Prentice Hall of India Pvt. Ltd. New Delhi, 2004. 4. E. Balagurusamy, Programming in ANSI C by, 7 th Edition, Tata McGraw-Hill Publishing Co. Ltd., New Delhi, 2017.			



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COURSE OBJECTIVE

This course makes the student to

1. learn a programming language.
2. learn problem solving techniques.
3. write programs in C and to solve the problems.

COURSE OUTCOMES (CO)

Course Outcomes	Aligned Programme Outcomes (PO)
<p>On completion of the course, students should be able</p> <ul style="list-style-type: none"> • read, understand, and trace the execution of programs written in C language. • write the C code for a given algorithm. • develop programs for complex problems applying the concepts of Arrays and pointers. 	<p>(i) progress the critical analysis and problem-solving skills required for R & D organization and industry.</p> <p>(ii) engage independent and lifelong learning with a high level of enthusiasm and commitment to improve knowledge and competence continuously.</p> <p>(iii) contribute significantly to academics through teaching and research.</p>

COURSE PLAN – PART II

COURSE OVERVIEW

This course will introduce

1. structured pseudo codes for a given problem.
2. Program designing in C using control statements, loop structures and arrays.
3. Functions and pointers to write C programs.

COURSE TEACHING AND LEARNING ACTIVITIES

Sr.No.	Week/Contact Hours	Topic	Mode of Delivery
1.	1 st , 2 nd & 3 rd week	Testing statements using Character set- Identifiers, Constants and keywords, Primitive datatypes- Operators and Expressions-Library functions	Problem solving/Demo
2.	4 th , 5 th week	Testing programs using Control statements-loop structures –arrays-types.	Problem solving/Demo
3.	6 th Week	Assessment - 1	Written test
4.	7 th week	Testing programs using string manipulations-functions.	Problem solving/Demo



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5.	8 th , 9 th week	Developing and testing programs using pointers and functions.	Problem solving/Demo
6.	9 th week	Assignment 2	
7.	10 th , 11 th and 12 th weeks	Developing and testing programs involving structures and command line arguments	Problem solving/Demo
8.	12 th Week	Assessment - 2	Written Test
9.	13 th week	Assessment – 2 (End Semester Exam)	

COURSE ASSESSMENT METHODS

S.No.	Mode of Assessment	Week / Date	Duration	% Weightage
1.	Assessment 1	6 th Week	1 hours	20%
2.	Assessment 2	12 th Week	1 hours	20%
CPA*	Compensation Assessment*	13 th Week	1 hour	20%
3.	Assessment 3	Assignments / viva		10%
4.	Assessment 4 (End Semester Exam)	14 th week	3 hours	50%

* One compensation assessment for absentees in the assessments (other than the final assessment) will be conducted. Only genuine cases of absence shall be considered.

COURSE EXIT SURVEY (mention the ways in which the feedback about the course shall be assessed)

1. Students can meet the faculty (with prior appointment) at any stage in the course duration in case he/she finds difficulty in understanding the topic.
2. Feedback form will be issued to students to express their comments about the course after completing the syllabus. Students are requested to give genuine feedback about the course.
3. Student knowledge about the topic covered in this course will be judged through marks obtained in examination.

COURSE POLICY (preferred mode of correspondence with students, compensation assessment policy to be specified)

MODE OF CORRESPONDENCE (email / phone etc)

Students can meet the course faculty by fixing appointment through E-mail (ranjani@nit.edu) or phone call (+91 9159177345) between 9:30 am to 5:30 pm in the working days.

COMPENSATION ASSESSMENT POLICY

1. Students who have missed the assessment-1 or assessment-2 or both can register for compensatory assessment which shall be conducted soon after the completion of the assessment 2 and before the regular semester examination. Other students were strictly NOT allowed to register for compensation assessment.



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2. The compensation assessment shall be conducted for 20 marks comprising the syllabus of both assessment 1 and assessment 2.
3. The Institute follows relative grading with flexibility given to class committee to decide the mark ranges for grades. All assessment of a course will be done on the basis of marks.

ATTENDANCE POLICY (A uniform attendance policy as specified below shall be followed)

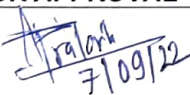
- **At least 75% attendance in each course is mandatory.**
- **A maximum of 10% shall be allowed under On Duty (OD) category.**
- Students with **less than 65% of attendance** shall be prevented from writing the final assessment and **shall be awarded 'V' grade.**

ACADEMIC DISHONESTY & PLAGIARISM

- Talking to other students, copying from others during an assessment will be treated as punishable dishonesty.
- Zero mark to be awarded for the offenders. For copying from another student, both students get the same penalty of zero mark.
- The departmental disciplinary committee including the course faculty member, PAC chairperson and the HoD, as members shall verify the facts of the malpractice and award the punishment if the student is found guilty. The report shall be submitted to the Academic office.
- The above policy against academic dishonesty shall be applicable for all the programmes.

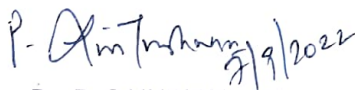
ADDITIONAL INFORMATION

FOR APPROVAL


7/09/22

PRAKRATI KUSHWAH

(Course Faculty)


7/9/2022

Dr. P. SAIKRISHNAN

CC-Chairperson



Dr. V. LAKSHMANA
GOMATHI NAYAGAM

HOD