



INTRODUCTION TO PROGRAMMING IN C

PROF. SATYADEV NANDAKUMAR

Dept. of Computer Science and Engineering
IIT Kanpur

INTENDED AUDIENCE : Any interested learners.

PRE-REQUISITES : No prior programming required; mathematical maturity of a second level UG student in science or engineering.

COURSE OUTLINE :

This is a course in programming in C. No prior programming experience is assumed; however, mathematical maturity at the level of a second year science or engineering undergraduate is assumed. We emphasize solving problems using the language, and introduce standard programming techniques like alternation, iteration and recursion. We will briefly glimpse the basics of software engineering practices like modularization, commenting, and naming conventions which help in collaborating and programming in teams.

ABOUT INSTRUCTOR :

Prof. Satyadev Nandakumar is an Assistant Professor from the Department of Computer Science and Engineering IIT Kanpur who specialises in Computable Analysis, Algorithmic Information Theory, Symbolic Dynamics. His research interests includes Theoretical Computer Science, Algorithmic Information Theory, Computable Analysis.

COURSE PLAN :

Week 01 : Introduction. Straight-Line Code. Variables, Operators, Expressions and Conditionals.

Week 02 : Loops.

Week 03 : Functions.

Week 04 : One-Dimensional Arrays and Pointers.

Week 05 : Recursion.

Week 06 : Multi-dimensional Arrays, Linked Lists.

Week 07 : Operating on Files.

Week 08 : Organizing C projects, working with multiple source directories, makefiles.

Roll No: NPTEL22CS40524475558

To
AJITH KUMAR
6/32, APPLIYAPATTI PERIYAPATTI (POST)
UDUMELPET (T.N), TIRUPPUR (DT)
UDUMELPET
TAMIL NADU - 642201
PH. NO :9025550169



Score	Type of Certificate
≥ 90	Elite+Gold
75-89	Elite+Silver
≥ 60	Elite
40-59	Successfully Completed
< 40	No Certificate

No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



Elite NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

AJITH KUMAR

for successfully completing the course

Introduction to Programming In C

with a consolidated score of **76** %

Online Assignments	25/25	Programming Exam	25/25	Proctored Exam	26.25/50
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Total number of candidates certified in this course: 1728

Prof. B. V. Ratish Kumar
Chairman, Centre for Continuing Education
IIT Kanpur

Feb-Apr 2022
(8 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur



Indian Institute of Technology Kanpur



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To validate and check scores: <https://nptel.ac.in/hoc>