



DIPLOMA IN ADVANCED COMPUTING

How to prepare for the CET?

The online Common Entrance Test shall consist of objective type multiple choice questions on Computing Fundamentals, Fundamentals of programming, C Programming and Object Oriented Programming Concepts. There will also be a section on Aptitude test as per GMAT pattern.

The CET will test the candidate's knowledge of the above topics. The candidate should possess good knowledge of C Language in terms of the syntax and its appropriate use. The candidate should carefully study the books recommended herein. However, merely reading language constructs from the book cannot develop programming ability. It is absolutely necessary to actually write one's own code in C Language and implement at least 100 good C Programs on a computer. These programs should be of increasing complexity and should exploit appropriate constructs and advanced features of C. Candidates should solve all the problems given in the recommended books. This will help the candidates in not only master the language but also developing good problem solving ability, which is most critical for any successful career.

Applicants should note that familiarity and practice is a mandatory requirement to clear the CET as well as keep pace with the rigorous schedule of the DAC course. A PreDAC course being conducted by various authorised centres may also be availed to prepare for the CET.

Syllabus for Common Entrance Test (CET)

Section I: Computing Fundamentals (10 marks)

Evolution of computers, Computer generations, Computer organization, Primary and Secondary storage, Input-output devices, Computer software, Operating systems, Data communications and computer networking, Multimedia, Classification of computers, etc.

Section II : Fundamentals of Programming (15 marks)

Algorithms, Flowcharts, Computer languages, System implementation and operation, File organizations and Data processing, etc.

Section III : Programming in C (50 marks)

Introductory concepts, C Fundamentals, Operators and Expressions, Data Input and Output, Control statement, Functions, Arrays, Pointers, Structures and Unions, Arrays, Stacks, Queues and Linked Lists (Single, double, Circular), etc.

Section IV :Basics of Object Oriented Programming & C++ Programming (25 marks)

Understanding of the object oriented concepts, such as Classes and Objects, Generalizations, Polymorphism, Abstract Classes and Re-usability, etc.

Section V : General Aptitude (50 marks)

Questions shall be modeled on GMAT pattern

Recommended Textbooks

1. Foundations of Computing - PK Sinha and Preeti Sinha (BPB)
2. Programming in ANSI C - E Balaguruswamy (TMH)
3. The Object-Oriented Thought Process - Matt Weisfeld (Techmedia)

Placement Cell

The placement cell provides employment opportunities to the students in several Indian and multinational IT companies. The best of IT companies visit our campus and the placement programmes at various locations assist the students to get better placement opportunities. For more details on the placement statistics, please visit the C-DAC, ACTS website.



For details of the Centres offering DAC programmes, latest updates on DAC modules and information visit us at <http://acts.cdac.in>
Courses offered by C-DAC, ACTS are autonomous and not affiliated to any University or AICTE.

C-DAC centres are located at :

- Bangalore (Knowledge Park) : +91-80-2534 1874 / 909 / 215
- Bangalore (Electronics City) : +91-80-2852 3300
- New Delhi : +91-11-2651 0212 / 3
- Hyderabad : +91-40-2340 1331 / 32
- Mumbai : +91-22-2620 1606
- Chennai : +91-44-2461 0880 / 0883
- Kolkata : +91-33-2357 9846 / 5989 / 3581
- Mohali : +91-172-223 7052-57
- Noida : +91-120-240 2551 / 60
- Thiruvananthapuram : +91-471-272 3333

Centre for Development of Advanced Computing (C-DAC)
Advanced Computing Training School (ACTS), (Headquarters)

5th Floor, N.S.G. IT Park, Aundh, Pune-411007, Maharashtra, India.

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E-mail: acts@cdac.in, Website: <http://acts.cdac.in>



An ISO 9001:2000 CERTIFIED ORGANIZATION

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For Latest information visit our website



FURTHER YOUR AMBITIONS

DAC

Course Modules

- C, C++ Programming & Data Structures
- Operating System Concepts
- Software Engineering & Project Management
- Web Programming & Extensible Markup Language (XML)
- Database Technologies (Using Oracle & SQL Server)
- Windows Programming using SDK
- J2SE - Core Java.
- J2EE - Enterprise Java
- Microsoft.net 3.5
- Upcoming Technology (Java Server faces)
- Live Project

About Us

Centre for Development of Advanced Computing (C-DAC) is a national initiative of the Department of Information Technology (DIT), Ministry of Communications and Information Technology (MC&IT), Government of India. Since its inception in the year 1988, C-DAC has pioneered the development of High Performance Computing (HPC) in the country covering RISC processors, interconnection networks, network connectivity and programming environment for scientific engineering, e-Governance and business applications. Towards fulfillment of this goal, C-DAC has advented the flexible and scalable parallel architecture, which has been realized in its celebrated 'PARAM' series of Supercomputers. C-DAC has now embarked upon the next stage in HPC with the national GRID initiative - Garuda Proof of Concept (PoC), all set to make available supercomputing resources to the entire scientific community across the country.

A major spin-off of the grand challenge expeditions into the various realms of state-of-the-art technologies has been the emergence of a high quality intellectual resource base at C-DAC in the form of an expert team with specialized knowledge of various facets of advanced computing. With such a resource base at its command, C-DAC has set up the Advanced Computing Training School (ACTS) to meet the ever-increasing skilled manpower requirements of the IT industry as well as supplement its intellectual resource base for cutting edge research and development.

C-DAC is committed to nation building through its Advanced Computing Training School (ACTS) and is the first Government Lab that has expanded its horizons globally, extending its high quality training services to countries like Mauritius, Ghana, Uzbekistan, Tajikistan, Dubai Myanmar, Tanzania and Japan. Presently, ACTS is offering its courses through a network of over forty five training centres spread across the country wherein thousands of students and professionals are being trained to enhance their skills, and equipped with the latest methodologies in advanced computing to enable them to make their mark in the Information and Communication Technology (ICT) industry.

Course Focus

The Post Graduate Diploma in Advanced Computing (DAC) is the flagship programme of ACTS. The course is targeted towards engineers and IT professionals who wish to venture into the domain of advanced computing. The course aims to groom the students to enable them to work on current technology scenarios as well as prepare them to keep pace with the changing face of technology and the requirements of the growing IT industry. The course curriculum has been designed keeping in view the emerging trends in advanced computing as well as contemporary and futuristic human resource requirements of the ICT industry. The entire course syllabus, courseware, teaching methodology and the course delivery have been derived from the rich research and development background of C-DAC. The depth and width of the course is unique in the industry covering a wide spectrum of requirements of the ICT industry. Running successfully for more than fifteen years, the DAC course has yielded thousands of students, who are well positioned in the industry today.

Course Highlights

- 24 weeks full-time Post-Graduate Course
- Well-equipped laboratory and can be accessed 24 hours.
- Live exercises relevant to the standards of industry.
- Placement assistance.
- Corporate / industry interaction
- Exposure to soft skills.
- Best Student award
- 100+ hrs of Business Communication, Aptitude and Personality Development

Eligibility

BE / ME or Equivalent (AMIE, AIETE), B.Sc (Engg), MCA (After B.Sc), MCS (After B.Sc), M Sc (Electronics / IT / IS / Instrumentation), MCM, MBA (Systems), BCS, B Sc (IT), B Sc (Comp. Sc.), BCA, BIS (Bachelor of Internet Sciences), Bachelor Of E-Commerce

Course Fee

Course Fee is Rs.66,000/- (Rupees Sixty six thousand only). The course fee has to be paid in two separate installments by Demand Drafts drawn on any Nationalised Bank in favor of "C-DAC, ACTS" and payable at Pune.

The first installment of Rs.2,500 /- (Rupees Two Thousand Five Hundred only) is to be paid after the declaration of the CET result and the second installment of the course fees of Rs.63,500/- (Rupees Sixty Three Thousand Five Hundred only) is to be paid on or before the last date mentioned in the course schedule on ACTS website <http://acts.cdac.in>



Application Form

C-DAC's online application form for DAC Course is to be filled online (recommended) at <http://acts.cdac.in>. Printed application forms along with the instructions sheet are available free of cost at all the training centres offering the DAC / Pre DAC course. The non-refundable registration fee of Rs.500/- (Rs 600/- for Printed Form) for the CET is to be paid by DD drawn in favour of "C-DAC, ACTS" payable at "Pune" and sent to the following address:

The Programme Coordinator,
Advanced Computing Training School, C-DAC, 5th Floor, N.S.G. IT Park, S.No. 127/2B/2A,
Aundh, Pune – 411 007, Maharashtra, India.

Selection Process

The selection process leading to confirmed admission shall unfold in three stages as described below:

Stage- I: Online Common Entrance Test (CET)

The Common Entrance Test (CET) for the admission process shall be conducted twice. The CET would be conducted online at the centres mentioned in the online application form.

Candidate can choose any one of the two available dates for the CET as per their convenience mentioned in the online application form. Candidates can select the city only after the receipt of the registration fees of Rs. 500 /- or Rs. 600 /- (whatever the case may be) at C-DAC, ACTS, Pune. Once the city is selected, the system will allocate date, centre & slot to the candidate for CET and no change of examination centre will be made under any circumstances whatsoever.

The CET of 120 minutes shall consist of online test of 150 questions. Each question shall carry one mark. There will be negative marking i.e., quarter (0.25) mark will be deducted for every wrong answer. The syllabus for the CET is given on page no 4 of this brochure and is also available on our website <http://acts.cdac.in>

Declaration of result

The result of the CET will be displayed on the website along with the percentile score of the candidates on day of the result mentioned in the course schedule. A message clearly indicating whether the candidate has qualified for Stage II & III will be displayed along with the percentile score in the form of a "CET Score Card". For this purpose candidates need to log on to the website using registration ID and password.

Candidate needs to update the details of DD of first installment of course fees of Rs. 2,500/- on ACTS website & then send the same on or before last date of first installment mentioned in the course schedule on our website. Candidate can select the centre for appearing for stage II & III of selection process only after the receipt of the DD of Rs.2,500/- at C-DAC, ACTS, Pune.

The facility of selection of the course and centre for undergoing the stage II and III of the selection process shall be made available in the descending order of the percentile on First-Come-First-Served basis. The Course name, exact date and time slot for the centre selection shall be mentioned on CET Score Card and the Schedule shall be updated on our website at <http://acts.cdac.in> on the date of declaration of CET result. The score of CET is valid for two consecutive batches.

Please note that the candidate is required to select the Course and Centre for admission on or before the date and time as given in the schedule.

Candidates are required to select the course (DAC / WiMC), and centre from the list of centre(s) available for selection as per candidates Percentile score and availability of seats at a particular centre during the date / time slot mentioned on CET score card.

After the candidate selects the course and centre for appearing in stage II and III of the selection process, he / she will be required to download & print the corresponding documents available on the result page and confirm participation for Stage II & III. The detailed instructions about the stage II & III shall be provided in these documents.

Candidates have to undertake stage II & III of the selection process only at the specific centre selected by the candidate. Subject to successful clearance of stage II & III, the candidate shall be offered confirmed admission to the same centre only.

At the end of Stage II & III a wait list will be declared (if any). The admission of the waitlisted candidates shall be declared based on the percentile of the candidate and seats available, which will be communicated to those students via e-mail.

Stage II: Practical Test

This stage shall consist of a practical test of 60 minutes duration in C Programming on a personal computer with Turbo C or equivalent compiler.

Stage III: Interview

This Stage shall consist of a technical interview based on the syllabus of the CET and a personal interview of the candidate immediately after the Practical Test (Stage II) on the same day.

