Course Title	Course Structure	Eligibility Higher Second Class (55% and above) in the final degree		Courses Offered @ the following	CET Centres
	onactaro	Engineering (UG/PG)	Others	C-DAC Centres	
Diploma in Embedded Systesms Design (DESD)	7 Modules 22 Weeks	EC/EL/EE/ EI/CS/CE/IT	M.Sc (E) M.Sc (I)	Bangalore/ Chennai Hyderabad / Kolkatta Noida / Pune Thiruvanthapuram Aurangabad (DOEACC)	Aurangabad Eangalore Chermai Gwalior Hyderabad
Diploma in System Software Development (DSSD)	9 Modules 22 Weeks	EC/EL/EE/ FI/CS/CF/II	M.Sc (C) M C A	Dangalore Chonnai Hyderabad Puno	Kolkata Mohali, Mumbai Ncida, Pune Thiruvananthpuram
Diploma in Advanced Business Computing (DADC)	10 Modules 22 Weeks	EC/EL/EE/ EI/CS/CE/IT	M.Sc (C) M.C.A	Hyderabad	Visakhapatnam

http://www.cdachyd.in/cet/ebrochure.php

# **DESD** Modules

## Detailed Syllabus

- Programming Concepts and Data Communication
- Real-time Operating Systems
- Embedded Systems Programming
- 8/16/32 bit Microcontrollers and Interfacing
- Digital Signal Processing
- Wireless Technologies and Mobile Programming
- Project & Seminar

## **Selection Procedure**

Applicants will undergo a National level Common Entrance Test (CET) that is common for all the three courses. The pattern of the test will be mainly objective type covering various technical and aptitude aspects. Duration of the test will be 120 minutes. Selection will be on the basis of performance in the CET, the preferences of course and the centre for admission opted by the applicants. The applicant's academic record will also be taken into consideration.

# How to Apply

The applicant can register for the Common Entrance Test (CET) online at http://www.cdachyd.in. The non-refundable registration fee of Rs. 350/- for the CET is to be paid through National Electronic Fund Transfer (NEFT) or by way of Demand Draft (DD) drawn on any nationalized bank in favour of "C-DAC Hyd - Training" payable at "Hyderabad"(refer Important Instructions in the Online Application) and

send to the following address:

To: The CET Co-ordinator Centre for Development of Advanced Computing (C-DAC) Nalanda Building # 1, Shivabagh, Ameerpet, Hyderabad – 500016 Andhra Pradesh(India)

Tel: +91-40-23737124/25 Fax: 040-23743382

#### mportant Dates

Last Date of Receiving CET Applications	: 29-01-2011
Date of Common Entrance Test (CET)	: 06-02-2011
CET Timing	: 11.00 am - 01.00 : pm
Date of Declaration of CET results	: 16-02-2011
Last Date for Payment of Course Fee	: 17-03-2011
Commencement of the Course	: 24-03-2011
Conclusion of the Course	: 24-08-2011

### Foundations of computing

- Boolean Algebra, Number Systems, Computer arithmetic, Logic Gates, Multiplexers, Decoders, Code Converters, Latches and Flip-flops, Counters, Shift-Registers.
- Computer Organization & Architecture : CPU, Memory and IO access, Memory maps, Read-Write operations, Programmed IO, Polled and Interrupt driven IO, DMA data transfer, static and dynamic memory, Cache memory, Virtual memory.
- Microprocessors (x86 architecture), Assembly Language Programming, instruction set and addressing modes, Memory and I/O interfacing.
- Operating System Concepts: Process, File, Memory, I/O Management; Batch Processing, Spooling, Multiprogramming, Multiprocessing, Time-sharing.
- Basics of Data Communication, Switching, Multiplexing, Demultiplexing, Synchronous/Asynchronous Communication, OSI and TCP/IP Protocol Suites, LAN

Topologies and Protocols (Ethernet-CSMA/CD, Token Ring, Token bus protocols), WAN Protocols (HDLC, X.25, Frame Relay, ISDN).

## C Programming Language & Data Structures

Constants, Data Types, Variables, Operators and Expressions, Control Flow - if, if-else, switch, for & while statements, functions, Arrays and Pointers, Structures and Unions, Input & Output in C, Preprocessor directives, Files, Bit wise operators & Bit-fields, Algorithm analysis, Lists, Stacks Queues, Trees, Graphs, Searching and Sorting Algorithms, Object Oriented Programming Concepts

## Aptitude

The Aptitude Test will be conducted on the GRE/GMAT pattern. The questions will test the applicant's Quantitative Aptitude, Analytical Ability and Vocabulary of the English Language.

## List of Reference Books for CET:

Title	Author	Publisher
Digital Logic and Computer Design	Morris Mano	PHI
Microprocessors and Interfacing	Douglas V Hall	ТМН
Data & Computer Communication	William Stallings	PHI
Computer Organization and Architecture	William Stallings	PHI
The C programming Language	B W Kernighan & Dennis Ritchie	PHI
Data Structures	Lipschutz and Seymour	Schaum Series
Operating System Concepts	Silbeschatz and Galvin	John Wiley & Sons