PhD Program of DA-IICT

Sanjay Chaudhary
Dean (Academic Programs), DA-IICT
PhD Program

• Commenced during 2002
• Specific areas of PhD
  – Electronics
  – Communication Engineering
  – Computer Science / Information Technology
  – ICT
  – ICT in Agricultural and Rural Development
  – Humanities, Arts and Social Sciences
  – Bio-medical
• We conduct PhD selection process twice every year: June/July and December
  – Written Test, followed by interviews
• Out of 53 PhD students, seven have completed and three will complete this year
• For details, please visit: http://www.daiict.ac.in/daiict/academics/phd.html
## Academic Requirements

<table>
<thead>
<tr>
<th>Program</th>
<th>Min Total Credits</th>
<th>Min Course Credits</th>
<th>Min Research Credits</th>
<th>Min No. of Courses</th>
<th>Min Residence (sems)</th>
<th>Max Duration (yrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph D – after B Tech/M Sc</td>
<td>96</td>
<td>36</td>
<td>48</td>
<td>12</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Ph D – after M Tech/M Phil</td>
<td>72</td>
<td>12</td>
<td>48</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Ph D – sponsored – after M Tech/M Phil</td>
<td>72</td>
<td>12</td>
<td>48</td>
<td>4</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Ph D – sponsored – after B Tech/M Sc</td>
<td>96</td>
<td>36*</td>
<td>48</td>
<td>8</td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>
Salient Features

• We insist on course work to strengthen the foundation
• PhD Comprehensive Exam
  – After completion of course credits
  – To evaluate preparedness of a candidate for research aptitude as well as overall knowledge in the area and not only a very specific research topic
  – Many PhD students are not found good in other related areas and face issues while working in academic and research organizations
• Financial Assistance for full time PhD students
  – Rs. 15,000 to Rs. 25,000 per month
• TCS Research Fellowship
• Residential PhD helps to generate quality research work and publication.
  – Advisable to spend at least first three years as a full time residential PhD student
MoUs

• Sponsored PhD candidates:
  – Space Applications Center
    In progress
  – Vivekanand Tribal Hospital, Chhatisgarh,
  – Tata Memorial Memorial Center
• ISEP, France: credit transfer
• IIT, Gandhinagar (in progress)
• Wright State University, Ohio, USA
• University of Regina, Canada
• ICRISAT
Research groups at DA-IICT

- Communication and Signal Processing
- Distributed & Service-Oriented Computing
- ICT in Agriculture & Rural Development
- Natural Information Processing
- Networks & Security
- Next Generation Wireless Systems
- Pattern Recognition & Image Processing
- Sensor Networks
- Speech Processing
- VLSI
- Wireless communication

http://www.daiict.ac.in/daiict/research/research_groups.html
Research Projects

• Funding received from following organizations:
  – Dept of Science and Technology, Govt. of India
  – Dept of Information Technology, GoI
  – National Innovation Foundation
  – Board of Research in Nuclear Sciences (BRNS)
  – The National Trust
  – National Fusion Programme
  – Wildlife Institute of India
  – Board of Research in Fusion Sciences
  – Private Companies: eZDI ...

• Four PhD students are working as full time Research Fellows on research projects
Institutional Collaboration

Network of Engineering Institutions (NEI)
• It is a cooperative endeavor, initiated in January 2011 to promote the quality of PhD research
• To provide quality courses through workshops conducted and evaluated by experts
• Initially in the area of VLSI

DA-IICT welcomes students from other institutions to carry out internships or project work under the guidance of our faculty. During autumn semester 2011-12, DA-IICT and IIT Gandhinagar initiated a process to jointly offer courses on electronics and communication, mathematics, science and humanities.
## Profile of PhD students

<table>
<thead>
<tr>
<th>Name</th>
<th>Area of PhD</th>
<th>Working at</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zakir Laliwala</td>
<td>Service Oriented Computing</td>
<td>IBM and his own company</td>
</tr>
<tr>
<td>Vikram Sorathia</td>
<td>Distributed Computing</td>
<td>Post doc: Twente University and University of Southern California</td>
</tr>
<tr>
<td>Uttam Bombale</td>
<td>Radio Frequency</td>
<td>Principal, Engg. College</td>
</tr>
<tr>
<td>Dilip Kumar G.</td>
<td>ICTARD</td>
<td>Head, Knowledge Management Group, ICRISAT</td>
</tr>
<tr>
<td>Sunil Jardosh</td>
<td>Sensor Networks</td>
<td>Asst. Prof., Shiv Nadar University</td>
</tr>
<tr>
<td>Ratnik Gandhi</td>
<td>Mathematics and TCS</td>
<td>Post doc, TIFR</td>
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</tbody>
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Thank you for your attention