

# QUALITY IMPROVEMENT PROGRAMME

**Sponsored by**  
ALL INDIA COUNCIL FOR TECHNICAL EDUCATION  
(A Statutory Body of the Government of India)

**STATUS REPORT**  
**2011-2012**



**CENTRE FOR EDUCATIONAL TECHNOLOGY**  
**INDIAN INSTITUTE OF TECHNOLOGY, GUWAHATI**

## **PREFACE**

The present report briefs about the activities of the overall Curriculum Development Cell and the Quality Improvement Programme at IIT Guwahati during the year 2011-2012.

During this year 09 numbers of teachers have joined the M. Tech. programme, and 09 numbers of teachers have joined the final Ph. D. programme of the institute under QIP.

Out of the twelve nos. of selected QIP short-term courses all 12 nos. of courses were conducted on different topics during this year and 06 nos. of CD Cell Projects were undertaken .

The overall guidance of the Director, IIT Guwahati and Dean (Academic), IITG in the CDC activities is highly appreciated. The valuable support of the members of the Advisory Committee is also greatly acknowledged. Thanks are also due to staff of the QIP and the administrative and accounts staff of the Institute, without their active cooperation, the activities of the QIP/CDC would not have been successfully carried out. The support of AICTE is also gratefully acknowledged.

**(Prof. S. Talukdar)**

**Coordinator, QIP**

## Quality Improvement Programme

### **Objectives & Programmes**

Quality Improvement Programme (QIP) of the Ministry of Human Resource Development, Department of Education, Government of India, under the sponsorship of All India Council for Technical Education, New Delhi has been in operation at the IIT Guwahati since 2003-2004.

**Quality Improvement Programme** is being implemented with the objective of upgrading the expertise, qualification and capabilities of the faculty members of degree level technical institutions. The major activities under the QIP include:

- **Masters and Doctoral Programme** : Under this scheme, faculty member of AICTE approved institutions are given opportunity to upgrade their qualifications. Certain selected institutions offer Masters and Ph.D Programmes to the faculty members and they are paid scholarships and contingency grant by the Council. Recently, the facility of pursuing Masters Degree programmes has been extended to approved polytechnic teachers also.
- **Short Term Programme** : In order to upgrade the knowledge and skills of the teachers working in the different institutions in the country, AICTE provides Financial Assistance for organizing short term training programmes in the emerging areas of Engineering Technology / Pharmacy / Management etc.
- **Curriculum Development** : The major QIP Centres are provided assistance to organize workshops for Curriculum Development. This leads to Model Curriculum, which is used as base documents by many institutions. Besides, faculty members of the institute are given a small grant to develop lecture notes, presentation slides and to write text books on various subjects.

The following activities took place in the financial year 2011-2012:

### Short Term Courses

List of Short Term Courses done under the financial year 2011-2012 are:

Sl. No.	Topic	Period	Department	Principal Faculty	No. of Participants
1	Data Structures & Algorithms	One Week July 4-8, 2011	Dept. of CSE	Dr. Pinaki Mitra	15
2	Tools for Bioresources Conservation	One Week July 11-15, 2011	Dept. of Biotechnology	Dr. Latha Ranjan, Dr. Utpal Bora	21
3	Society and the Web	One Week Sept 19-23, 2011	Dept. of CSE.	Dr. Sanasam Ranbir Singh, Dr. Amit Awekar	27
4	VLSI Architectures for Image and Video Processing Systems	One week Sept 19-24, 2011	Dept. of EEE.	Dr. S.R. Ahamed	30
5	Computational Techniques in Physics	One week August 1-6, 2011	Dept. of Physics	Dr. B.R. Boruah & Dr. S. Das brboruah@iitg.ernet.in, sbdas@iitg.ernet.in	21
6	Recent Trends in fuels and Combustion	One week Aug 29-Sept 02, 2011	Dept. of ME	Dr. P. Muthukumar & Dr. N. Sahoo	32
7	Digital Communication Techniques	One Week Sept 12-16, 2011	Dept. of EEE	Dr. P.R. Sahu	23
8	Recent Advancements in Micro Fluidics Technology	One week Oct 31-Nov 4, 2011	Dept. of ME	Dr. Ashis Kr. Sen Dr. S. Kanagaraj	18
9	Hydroelectric Power Development	One week Dec 5-9, 2011	Dept. of EN	Dr. Pinakeswar Mahanta Dr. Rajib K. Bhattacharjee Dr. Karuna Kalita	30
10	Integrated Solid Waste Management	One Week Jan 9-13, 2012 (Revised date)	Dept. of CE	Dr. Ajay Kalamdhad	30
11	Graphic Design	One Week Feb 6-10, 2012 (Revised date)	Dept. of Design	Dr. D. Udaya Kumar	33

12	Large River Management : Hydraulics, Hydrology and Ecology	One week Jan 16-21, 2012	Dept. of CE	Dr. Bimlesh Kumar Dr. S. Dutta	23
<b>Total No. of Participants</b>					<b>303</b>

### Curriculum Development Projects

The following CD Cell projects for financial year 2011-2012 under QIP Scheme were undertaken:

Sl. No.	Name of the Proposer & Dept.	Type of project	Title of the project
1	Dr. U.K. Saha Dept. of Mechanical Engg.	Slide Preparation	An Introduction to Aerospace Engineering
2	Dr. Pankaj Biswas & Dr. KSRK Murthy Dept. of Mechanical Engg.	Preparation of Lab Manual	Preparation of Lab Manual for strength of material Lab of Mechanical Engineering Department
3	Dr. Sougata Karmakar, Dept. of Design	Lecture notes preparatory to a textbook	Digital Human Modeling and Simulation in Product and Workstation Design
4	Dr. Latha Rangan, BT	Slide Preparation	Preparation of Instructional Material in Basics of IPR and Patents
5	Dr. Liza Das, HSS	Slide Preparation	Critical Development Theory
6	Dr. Sambit Mallick, HSS	Preparation of Textbook	Modernity: Sociological Perspectives

## Ph.D. and M. Tech. Admissions:

The following students have been joined to different departments:

### A. Final admission to Ph. D. programme for July 2011

Sl. No.	Name	Department	Name of the Parent Institute
1	Y BidyaLaxmi Devi	Dept. of Chemical Engg.	NERIST, Arunachal Pradesh
2	Mousam Handique	Dept. of CSE	Assam University, Assam
3	Satish S	Dept. of Design	BMS College of Engg., Karnataka
4	Bajrangbali	Dept. of EEE	PES School of Engg., Karnataka
5	Ramesh K	Dept. of EEE	University BDT College of Engg., Karnataka
6	Pranab Jyoti Haloi	Dept. of EEE	Jorhat Engg. College, Assam
7	Sonali Biswas	Dept. of EEE	Jorhat Engg. College, Assam
8	N Shanmuga Priya	Dept. of Mechanical Engg.	Siddaganga Inst. of Tech. , Karnataka
9	Rupjyoti Bordoloi	Dept. of Civil Engg.	Jorhat Engg. College, Assam

### Summary Information of The Number of Admitted to Ph.D Programme Under QIP at Indian Institute of TechnSonali Biswasology, GuwahatiN. Sa State-wise for the Year 2011-2012

Sl.No.	State	No. Of Candidates Admitted to Ph.D
1.	Karnataka	<b>04</b>
2.	Assam	<b>04</b>
3.	Arunachal Pradesh	<b>01</b>
	<b>Total:</b>	<b>09</b>

**B. Admission to M. Tech. Programme for July 2011**

Sl. No.	Name	Department	Name of the Parent Institute
1	Kambam Kiran Singh	Dept. of Civil Engg.	NERIST, AP
2	Arup Deka	Dept. of Civil Engg.	JEC, Assam
3	Rupjyoti Bordoloi	Dept. of Civil Engg.	AEC, Assam
4	Santosh K Hotta	Dept. of Mechanical Engg.	JEC, Assam
5	Mafidur Rahman	Dept. of Mechanical Engg.	MIT, Orissa
6	Bijay K. Roy	Dept. of Mechanical Engg.	JEC, Assam
7	Debarupam Gogoi	Dept. of Mechanical Engg.	JEC, Assam
8	Leena H. Nemade	Dept. of Mechanical Engg.	Don Bosco College of Engg. & Tech., Assam

**Year-Wise and Cumulative Data of the Number of M.Techs and Ph.Ds who have joined the QIP Programmes since inception**

No. Of Candidates				
Year	Admitted		Completed	
	M.Tech.	Ph.D.	M.Tech.	Ph.D.
2003-2004	--	--	--	--
2004-2005	05	03	--	--
2005-2006	06	07	--	--
2006-2007	12	08	01	--
2007-2008	02	03	05	--
2008-2009	03	05	11	02
2009-2010	05	02	02	--
2010-2011	03	01		
2011-2012	08	09		
<b>Total:</b>	<b>42</b>	<b>38</b>		

**Year-Wise and Cumulative Number of Short Term Courses**

Year	No. Of Courses
2003-2004	04
2004-2005	11
2005-2006	12
2006-2007	12
2007-2008	14
2008-2009	13
2009-2010	09
2010-2011	13
2011-2012	12
<b>Total:</b>	<b>100</b>

