

QUALITY IMPROVEMENT PROGRAMME

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

STATUS REPORT
2006-2007



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 2006-2007.

During this year 12 numbers of teachers have joined the M. Tech. programme, and respectively 7 and 8 numbers of teachers have joined for the advance and final admissions in Ph. D. Programme of the institute.

Twelve nos. of QIP short-term courses were conducted during the year on different topics.

The overall guidance of the Director IIT Guwahati 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.

(Dr. R. Tiwari)

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 a base documents by many institutions.

The following activities took place in the financial year 2006-2007:

Short Term Courses

List of Short Term Courses done under the financial year 2006-2007 are

	Topic	Period	Department	Principal Faculty
1	Recent Trends in Dam Engineering	June 05 - 09, 2006	Civil Engg.	D. Maity
2	Green Chemistry and Green Technology	June 05 - 09, 2006	Chemistry	A.T. Khan
3	Mathematical Techniques in Science and Engineering	June 26-30, 2006	Mathematics	S. N. Bora
4	Fundamental Techniques in rDNA Technology	July 03 -09, 2006	Biotechnology	S. S. Ghosh, L. Sahoo & A. Ramesh
5	Application Specific Algorithms: Design and Analysis	July 04-08, 2006	Computer Science & Engg.	Dr. P. Mitra
6	Industrial Design Consideration in Plastic Products	September 11-15, 2006	Design	Ravi M. Punekar
7	Graphic Design Elements for Effective Communication	October 3 – 7, 2006	Design	Utpal Barua
8	Hydroinformatics and its Application to Flood Management	October 16-20, 2006	Civil Engg.	S. Dutta
9	Recent Developments in Wastewater Treatment Using Anaerobic Reactors	December 4 - 8, 2006	Civil Engg.	S. Chakraborty & M. Jawed
10	Biomedical, Speech and Image Processing	December 11 -15, 2006	Electronics & Communication Engg.	S.R.M. Prasanna & S. Dandapat
11	Rapid Product Development	December 11 -15, 2006	Mechanical Engg.	G. Saravana Kumar
12	Training Programme on Matrix Computations and Applications	December 18 -23, 2006	Mathematics	R. Alam & R. K. Sinha

Curriculum Development Projects

The following CD Cell projects for financial year 2006-2007 under QIP Scheme were undertaken:

Sl.No.	Name of the Proposer & Dept.	Type of project	Title of the project
1	Mr. Mandar Rane Dept. of Design	Teacher's manual	Design Analysis and Critics
2	Dr. P. Kr. Jha Dept. of Mech. Engg.	Slides preparation	Engineering Materials
3	Dr. Uday Shanker Dixit Dept. of Mech. Engg.	Lecture notes	Finite Element Methods in Engineering
4	Dr. U. K. Saha Dept. of Mech. Engg.	Power-Point presentation slides	Gas Turbine Theory
5	Dr. K.S.R.K. Murthy Dept. of Mech. Engg.	Power-Point presentation slides	Solid Mechanics
6	Dr. L. Sahoo Dept. of Biotechnology	Laboratory manual	Plant Biotechnology
7	Prof. A. T. Khan Dept. of Chemistry	Lecture notes with Power-Point presentation	Basic Principles of Organic Chemistry and Organic Spectroscopy
8	Dr. R. Alam Dept. of Mathematics	Lecture notes	Matrix Computation
9	Dr. M. K. Das Dept. of Mech. Engg.	Lecture notes	Computational Fluid Dynamics and Heat Transfer
10	Prof. Alike Khare Dept. of Physics	Lecture notes	Optoelectronics

Ph.D. and M. Tech. Admissions:

The following students have been joined to different departments:

A. Advance admission to Ph. D. programme for July 2006

Sl. No.	Name	Department	Name of the Parent Institute
1.	Malaya Chetia	Civil Engg.	Assam Engineering College, Guwahati
2.	Yendrembam A. Singh	Civil Engg.	Manipur Institute of Technology, Manipur
3.	Maushumi Barooah	CSE	Assam Engineering College, Guwahati
4.	K.C. Narasimhamurthy	ECE	Siddaganga Institute of Technology, Karnataka
5.	Dabadatta Pati	ECE	Balasure College of Engineering, Balasure
6.	Rupaban Subadar	ECE	North Easter Regional Institute of Science & Technology, Arunachal Pradesh
7.	D. Senthilkumar	M.E.	Arunai Engg. College, Tiruvannamalai
8.	Manjuri Hazarika	M.E.	Assam Engineering College, Guwahati

Summary Information of The Number of Teachers Admitted to Ph.D Programme Under QIP at Indian Institute of Technology, Guwahati State-wise for the Year 2006-2007

Sno.	State	No. Of Candidates Admitted to Ph.D
1.	Assam	03
2.	Arunachal Pradesh	01
3.	Karnataka	01
4.	Manipur	01
5.	Orissa	01
6.	Tamilnadu	01
	Total:	08

B. Admission to M. Tech. Programme for July 2006

1	Sangeeta Shougrakpam	Civil Engg.	Manipur Institute of Technology, Manipur
2	Amrita Bose Paul	CSE	Assam Engineering College, Guwahati
3	Sounak Paul	CSE	Birla Institute of Technology, Jharkhand
4	Rameshwar Nath Tripathy	CSE	Northern India Engineering College, Lucknow
5	Biswa Mohan Acharya	CSE	ITER, Orissa
6	Sanjeev kumar Gupta	ECE	Faculty of Engineering and Technolo, Agra, UP
7	Malaya Kumar Nath	ECE	SIET, Dhenkanal
8	Gupteswar Sahu	ECE	MITS Engg. College, Orissa
9	Santoshkumar	ECE	Guru Nanak Dev Engg. College, Bidar
10	Janmejaya Rout	ECE	Balasore College of Engg., Orissa
11	Prangya Paramita Pradhan	ECE	IACR, Orissa
12	V. N. Lakshmi Durga	ME	Institute of Advanced Computer and Research, Orissa

Summary Information of The Number of Teachers Admitted to M.Tech Programme Under QIP at Indian Institute of Technology, Guwahati State-wise for the Year 2006-2007

Sno.	State	No. Of Candidates Admitted In M.Tech
1.	Assam	01
2.	Jharkhand	01
3.	Karnataka	01
4.	Manipur	01
5.	Orissa	06
6.	Uttar Pradesh	02
	Total:	12

Year-Wise And Cumulative Data Of The Number of M.Techs And Ph.Ds Who Have joined The QIP Programmes Since Inception

Year	No. Of Candidates			
	Admitted		Completed	
	M.Tech.	Ph.D.	M.Tech.	Ph.D.
2003-2004	--	--	--	--
2004-2005	05	03	*	*
2005-2006	06	07	*	*
2006-2007	12	08	*	*
Total:	23	18		

* To be updated sin subsequent report

Year-Wise And Cumulative Number of Short Term Courses

Year	No. Of Courses	No. Of Participants
2003-2004	04	*
2004-2005	11	*
2005-2006	12	*
2006-2007	12	*
Total:	39	

* To be updated sin subsequent report

State-Wise Distribution Of M.Tech And Ph.D Students.

Sno.	State	No. Of Candidates Admitted In M.Tech	No. Of Candidates Admitted In Ph.D
1.	Assam	06	12
2.	Andhra Pradesh	--	01
3.	Arunachal Pradesh	--	01
4.	Jharkhand	01	
5.	Karnataka	01	01
6.	Kerala	01	
7.	Manipur	01	01
8.	Orissa	10	01
9.	Tamilnadu	01	01
10.	Uttar Pradesh	02	
	Total:	23	18

During the financial year 2006-07 admissions activities for the PhD and M.Tech. under QIP scheme took place and results were declared in month of April so it has not been reported in the present report.
