PLACEMENT BROCHURE

MATHEMATICS AND COMPUTING

(2016-2018)

I NDIAN INSTITUTE OF TECHNOLOGY

P A T N A

1

About Us

Mathematics and Computing is an amalgamation of Mathematics and Computer Science.Through robust coursework in computational mathematics and computer science, this program is designed to provide students with the knowledge and skills necessary for a professional career or higher studies. This is done through coursework in mathematical modeling, scientific computing, advanced computational algorithms, and application field etc.

The rigour of pure mathematics coupled with the most flexible elective driven structure in the institute gives the students an ample opportunity to their skill in varied fields of interests ranging from data analytics, computer science, computational mathematics, optimization, parallel computing to statistics, finance and other applied fields.The courses offered here are taken by professors who are leading researchers in that field.

Why Recruit Us?

The degree course gives a firm foundation in Mathematics and Computer science, in particular, Pure Mathematics, Numerical Analysis and Statistics, and covers all the essentials of Computer Science , with an emphasis on developings of software, improving coding skills and reasoning formally.We have read pure mathematics and applied it in Computer Science. By the start of the Industrial Placement students would have used a wide variety of programming languages and software tools.

M.Tech. in Mathematics and Computing, Department of Mathematics with collaboration to Department of Computer Science at IIT Patna is one of the few branches in the country that satisfies the need for sophisticated mathematics for modern scientific investigations and technological developments. Post graduates of this course will be ready for careers in software industries, financial institutions and government organizations or for pursuing research.Our Industrial placement programme is a way to exchange new ideas combined with fresh enthusiasm and knowledge of some of the latest technology, the opportunity to encourage and invest in computer engineers and scientists of the future.

Course Offered

Core course

- Database and Datamining
- Probability And Statistics And Stochastic Process
- Design And Analysis Of Algorithm
- Numerical Optimization and Programming
- Computational Differential Equations
- Design And Analysis Of Algorithm
- Technical Communication

Lab

- Simulation lab in R
- Data structure and Algorithmic lab in C

SEMINAR

M TECH THESIS

Elective course

- Advances in Algorithm
- Artificial Intelligence
- Formal Methods For Analysis and Verification
- Natural Language Processing
- Introduction To Deep Learning
- Network Science
- Distributed System
- Cryptography
- Wireless Networks
- Statistic signal processing for communication
- Fuzzy sets and Artificial Intelligence

Research Lab

- ➤ SPWICOM (Signal Processing For Wireless Communication)
- ➤ Statistics Lab
- ➤ Elsevier Centre for Excellence of Natural Language Processing
- ➤ Shusrut: ezDI Research Lab on Health Informatics
- ➤ Advanced Computing Lab

Paper Published

Pracheta Sahoo (M.Tech 2014-16) published a research paper Analysing Structured Scholarly Data Embedded in Web Pages" with Dr.Sriparna Saha (IIT Patna)and Dr. Stefan Dietze (L3S Research Lab, Hannover)

Amit Kumar(M.Tech 2014-16) published a research paper "Beyond Sentiment Lexicon combining Domain dependency and distributional semantic features for aspect based sentiment analysis" with Dr. Asif Ekbal(IIT Patna) and Chris Biemann

Abdus Samad(M.Tech 2014-16) "Receiver Design for Quasi-Asynchronous MC-CDMA by using CSS Code",with Dr. Sudhan Majhi, Considered for Elsevier publications, 2016

Mohammed Arif Khan (M.Tech 2013-15) "Simultaneous Feature Selection and Parameter Optimization Using Multi-objective Optimization for Sentiment Analysis", in Proceedings of the 12th International Conference on Natural Language Processing (ICON-15), Trivandrum, India, December, 2015 under guidance of Dr. Asif Ekbal

Achievements of Students

• Our student got selected in DAAD IIT Master Sandwich Programme

• Our students have good contribution in reaserch as well as in Industrial area.

• Some of our students grab the oppertunity for higher studies at well know Foreign as well Indian University (eg. University of Dallas, USA)

• Some are also contributing to government sector.

• For past few years students of this stream are doing excel in academics securing highest CPI among all branches of Mtech.
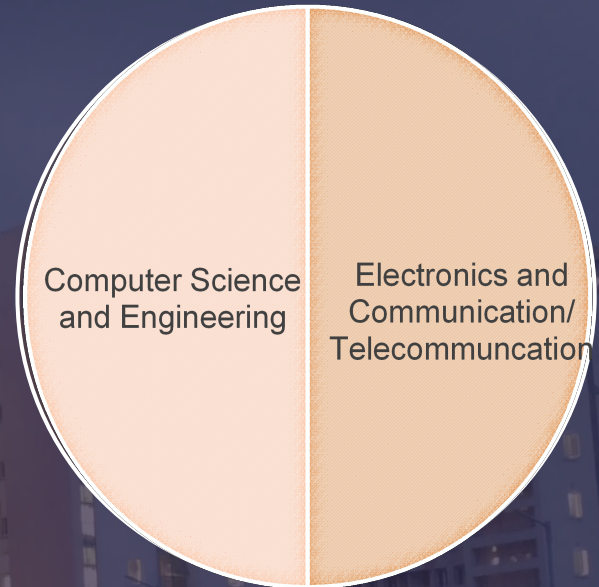
Students Profile

On Going Projects:

- Application Of Deep Learning for crisis Response using social media.
- Information Extraction using social media .
- Activity Recognition using Machine learning.
- Information Extraction using online social network.
- PAPR reduction on OFDM using sequence.
- Reliabilty estimation using censored observation.
- Multilingual Question Answering using Deep Learning.
- ADRC based control of Maglev .

Students BTech Background:

Computer Science and Engineering

Electronics and Communication/ Telecommuncation

Contact Us

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