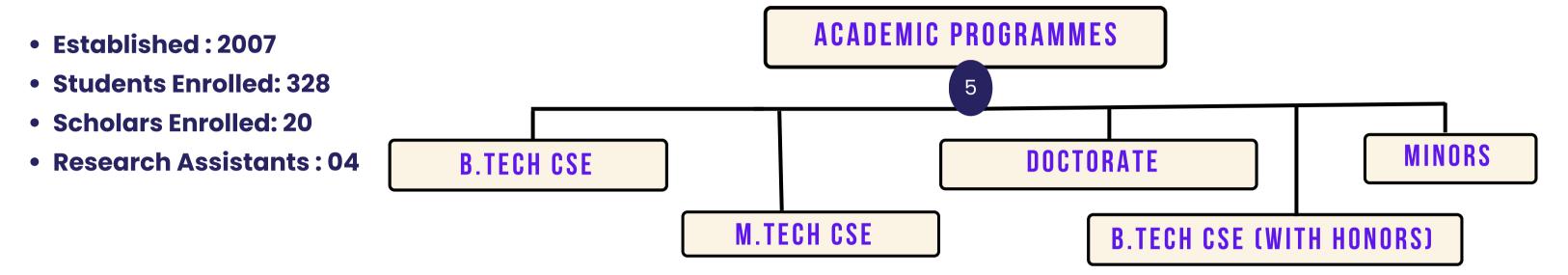
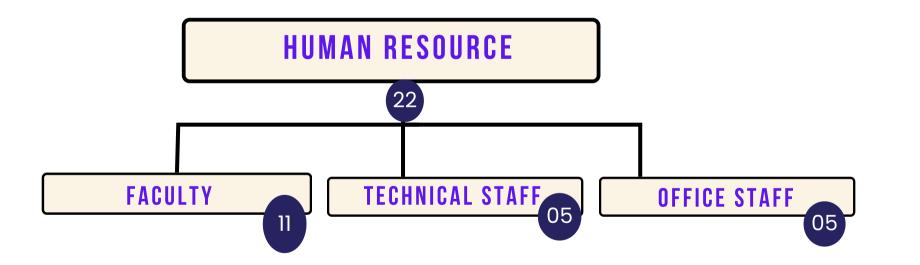


DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING ISLAMIC UNIVERSITY OF SCIENCE AND TECHNOLOGY, KASHMIR



DEPARTMENT





internet of things
machine learning
computer architecture
internet of things
deep learning
graph analytics
blockchain machine learning
reinforcement learning
evolutionary computing
evolutionary computing
anaph analytics
information diffusion
natural language processing
information diffusion
formation diffusion
day barring reinforcement learning
evolutionary computing
information diffusion
soft computing
information diffusion
day barring reinforcement learning
information diffusion
day barring
information diffusion
day barring
day barring
information diffusion
day barring
day barring
day barring
information diffusion
day barring
day barring
information diffusion
day barring
day barring
information diffusion
day barring
day barring
day barring
information diffusion
day barring
day barri





VISION

To produce globally competent professionals by imparting quality education with focus on cutting-edge technology and interdisciplinary research of high distinction, both of value and relevance to the society we serve.

MISSION

- To provide excellent engineering education in a state-of-the-art environment
 - To prepare students to become computer professionals not only for the industry, but government and academia as well
 - To attain self-sustainability and overall development through research, consultancy and development activities
- To provide an environment in which students are given the essential resources to address, research and solve real-world problems, participating in interdisciplinary and multidisciplinary research and its applications
 - To encourage students to become self-motivated, problem-solving individuals who can find and understand the knowledge needed to be successful in the profession.
 - To provide intellectual inputs to state and national industries in the form of qualified and trained manpower.

6

3



STRENGTHS

Faculty with diversified areas of specialization

State-of-the-art High Performance Computing Facilities

Adequate Library & e-resources

Robust in-house ERP

Timely Grievance Redressal Mechanism







Dr. Assif AssadPh.D (IIT Roorkee)
Machine Learning, Deep Learning



Dr. Syed Zubair Ahmad ShahPh.D (Jamia Millia Islamia)
Data Mining, Data Analytics



Dr. Riaz Ahmed KhanPh.D (NIT Srinagar)
Computer N/Ws, Info. Security



Dr. Sajaad Ahmed Lone (HEAD)Ph.D (NIT Srinagar)
N/W Security, Image Processing



Dr. Adil BashirPh.D (NIT Srinagar)
Internet of Things, Cyber Security



Dr. Insha AltafPh.D (SMVDU, Jammu)
Artificial Intelligence



Dr. Asif Ali BankaPh.D (NIT Srinagar)
Graph Analytics, Info. Diffusion



Dr. Sahil ShollaPh.D (NIT Srinagar)
Computational Ethics, IoT



Ms. Anam Iqbal M.Tech Artificial Intelligence



Mr. Syed Mujtiba Hussain
Ph.D Pursuing (NIT Srinagar)
Internet of Things



Dr. Ahsan HussainPh.D (NIT Goa)
Data Science, Soft Computing





PROGRAMME OBJECTIVES

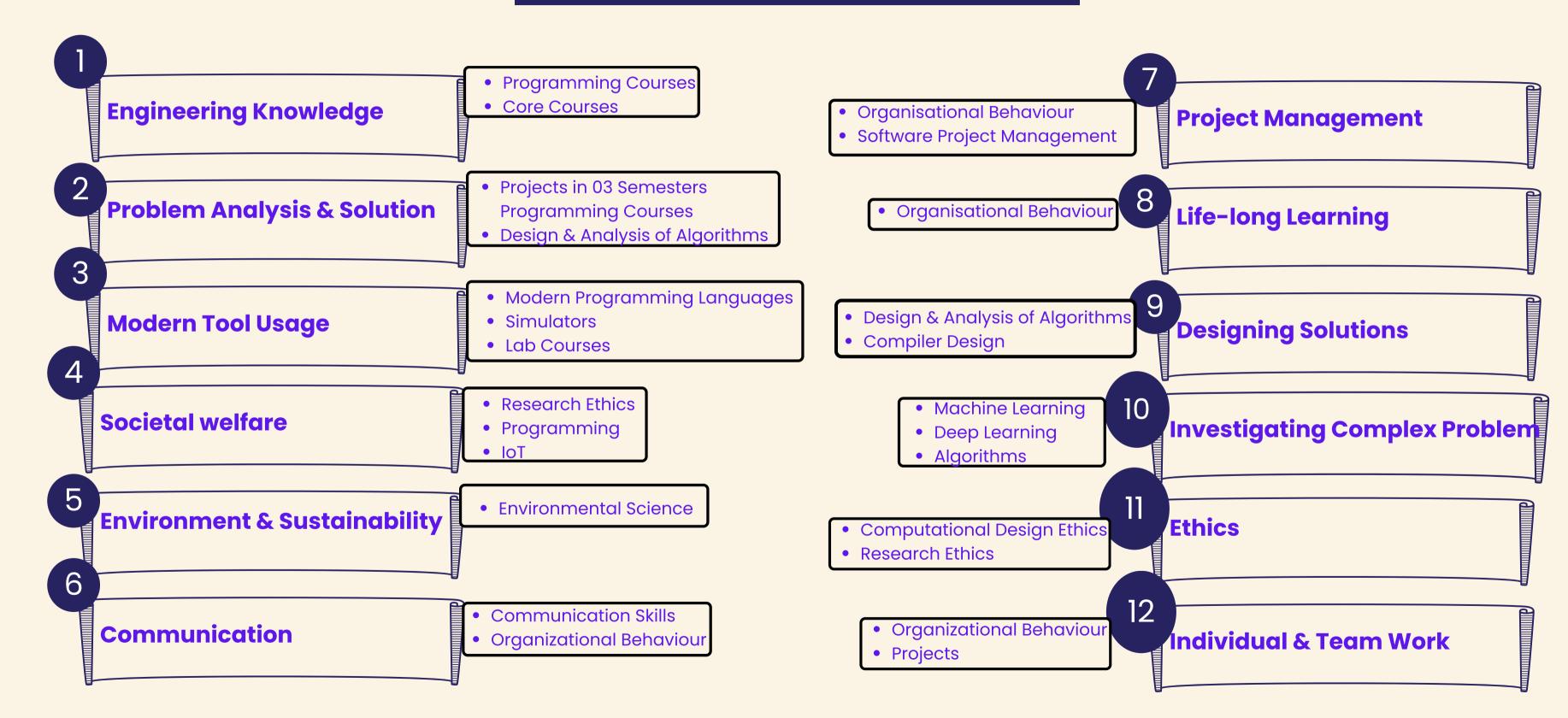
To produce globally competent engineers with innovative and problem solving skills for addressing emerging technological challenges

To produce competent workforce for industry & research involving innovation, engineering and entrepreneurship

To inculcate ethical values among students for overall development of society



PROGRAMME OUTCOMES





CREDIT DISTRIBUTION



Minimum Credits 16

Core 137

Discipline Centric
Electives
15

Open Electives

MOOCs Credits 0

M.Tech CSE

Minimum Credits 71

Ph.D

Minimum Course Work B.Tech CSE (Honors)

Minimum Credits 161 + 20

Core 137

Discipline Centric 15

Open Electives 08

ACOCs Credits 21

Dept. of CSE, IUST



SALIENT FEATURES OF CURRICULUM

Industry Driven

Diverse Discipline Centric and Open Electives

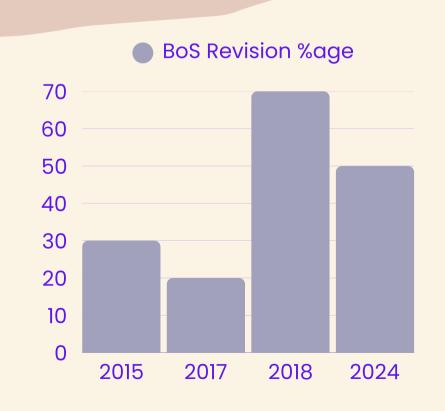
60% courses focusing on employability / entrepreneurship skill development

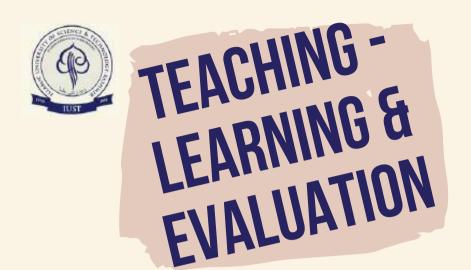
Courses on Disruptive Technologies

Designed and modelled based on the feedback of faculty, industry experts, alumni & students

Courses on environment, sustainability, human values & professional ethics

- Environmental Science
- Computational Design of Ethics
- Advanced Computational Design of Ethics
- Research and Publication Ethics





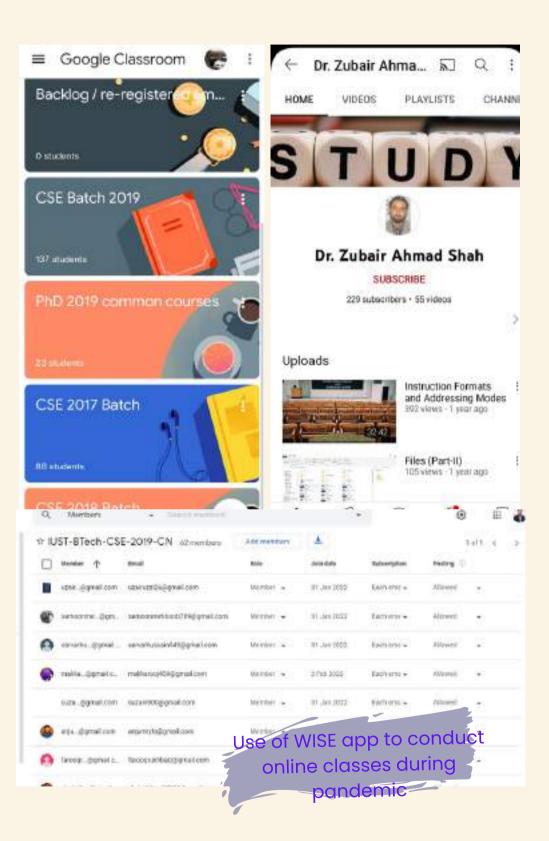
ICT INTERVENTIONS

Complete track of attendance, lecture plan, lecture delivery, syllabus coverage & results on ERP.

24 x 7 access to e-resources (494 e-books)

ICT for effective teaching

ICT enabled: Labs 100%, Classrooms 75%





ENHANCED LEARNING

Participative Learning
Projects & Seminars

Problem Solving Methodologies
Programming Assignment, Live Projects





Experiential Learning

Internships & Industrial Visits (IIT ROPAR, BOMBAY, NIELET, DUCAT)



DEPARTMENTAL INITIATIVES

SLOW LEARNERS

Mentor-Mentee Meets

Parent - Teacher Meets

Programming Day

Distribution of e- material

Remedial Sessions

ADVANCED LEARNERS

B.Tech Honors Degree through MOOCs

Seed Funding for Start-ups from CIED

Funding for innovation from DIC, IUST

Internships from IITs





RESEARCH PROJECTS, GRANTS, AND PUBLICATIONS

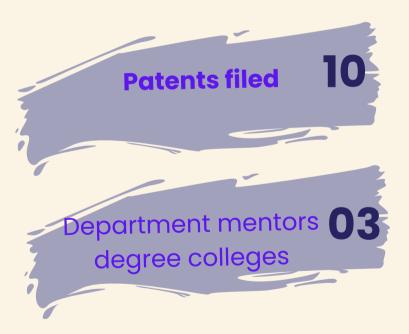
Total Grant 16.80 Crores

Completed 09

Ongoing 06

Research Scholars 20

Research Assistants 04









RECENT PUBLICATIONS

- Firdous, Naira, Nusrat Mohi Ud Din, and Assif Assad. "An imbalanced classification approach for establishment of cause-effect relationship between Heart-Failure and Pulmonary Embolism using Deep Reinforcement Learning." Engineering Applications of Artificial Intelligence (2023). SCIE Indexed; Impact Factor =7.5.
- Dar, Jawad Ahmad, Kamal Kr Srivastava, and Sajaad Ahmed Lone. "Fr-WCSO-DRN: fractional water cycle swarm optimizer-based deep residual network for pulmonary abnormality detection from respiratory sound signals." SN Computer Science (2022). SCIE Indexed; Impact Factor =3.78.
- Malla, Adil Mudasir, and Asif Ali Banka. "Sustainable signals: a heterogeneous graph neural framework for fake news detection." International Journal of System Assurance Engineering and Management (2024). SCOPUS Indexed; Impact Factor =1.6.
- Hussain, Syed Mujtiba, and Gh Rasool Begh. "Hybrid heuristic algorithm for cost-efficient QoS aware task scheduling in fog-cloud environment." Journal of Computational Science (2022). SCIE Indexed; Impact Factor = 3.1.
- Kumar, Mudasir Ahmad, Aga Basit, Tariq Masoodi, Sanjib Chaudhary, Assif Assad, Muzafar Rasool Bhat, Zubair A. Shah et al. "Nuclear receptor subfamily 4A2: Novel role and a potential therapeutic lead in cancers." Journal of Clinical Oncology (2024). SCIE Indexed; Impact Factor = 45.
- Iqbal, Aga Basit, Idris Afzal Shah, Injila, Assif Assad, Mushtaq Ahmed, and Syed Zubair Shah. "A review
 of deep learning algorithms for modeling drug interactions." Multimedia Systems 30, no. 3 (2024):
 124. SCIE Indexed; Impact Factor = 3.9.
- Reshi, Iraq Ahmad, and Sahil Sholla. "Securing IoT data: Fog computing, blockchain, and tailored privacy-enhancing technologies in action." Peer-to-Peer Networking and Applications (2024). SCIE Indexed; Impact Factor = 3.3.



RECENT PATENTS

- Ethics Switching: Toward exception handling in Ethics of Operation, Applicant: Sahil Sholla et. al.
 (Patent no. 427522); Granted: 2024; Patent Status: Granted.
- An Artificial Intelligence/Machine Learning-Based System for Predicting Cervical Cancer Subtypes
 Using Haematoxylin and Eosin Whole-Slide Images: Assif Assad et. al., Application no.
 202311027701); Date of publishing: 19-05-2023; Patent Status: Published.
- A system and Method for Early Prediction of Esophageal Cancer Subtypes from Histopathology lamges: Assif Assad et. al., (Application no. 202311050226); Date of Publishing: 25-08-2023; Patent Status: Published.
- System and Method for Identifying and Classifying Handmade and Machine-Made Rugs using an Artificial-Intelligence Model, Applicant: Assif Assad et. al., (Application no. 202311050849); Date of Publishing: 25-08-23; Patent Status: Published.
- Automatic Paddy Transplanter utilizing Robotic Arm with IoT-enabled Monitoring and Control, Zubair Ahmad Shah et. al., (Application no. 202411078077), Date of publishing: 25-10-2024, Status: Published.



RECENT RESEARCH PROJECTS

- Effective application of artificial intelligence in design climate resistant and occupancy-based structures. PI: Asif Banka, SERB SURE, (Amount of Grant: ₹26.9 lac) Start Date: 22-09-2023; Project Status: Ongoing.
- A Novel approach to Head and Neck Cancer Diagnosis Integration of Holographic Imaging and Deep Learning DST-WISE. Mentor: Ahsan Hussain, (Amount of Grant: ₹25.4 lac); Start Date: 22-08-2024; Project Status: Ongoing.
- Authenticating J&K Domicile Certificate Using Biometric Based QR Codes. Co Pl: Sajaad Ahmed Lone, JKST&IC (Amount of Grant: ₹10 Lac); Start Date: 27-12-2023; Project Status: Ongoing.
- Privacy Preserving Pandemic Tracing Using Smart Contracts in Blockchain (B-IoT). Pl: Sahil Sholla,
 JKST&IC (Amount of Grant: ₹7.3 Lac); Start Date: 27-12-2023; Project Status: Ongoing.
- Diagnosing and addressing psychological issues and mental disorders using Machine Learning. Pl: Zubair Ahmad Shah, JKST&IC (Amount of Grant: ₹10.8 lac); Start Date: 27-12-2023; Project Status: Ongoing.
- Artificial Intelligence based deep learning model to predict human papilloma virus infection in Head and Neck squamous cell carcinoma patients using Histopathology images. PI: : Assif Assad, JKST&IC (Amount of Grant: ₹10 Lac); Start Date: 27-12-2023; Project Status: Ongoing.
- Secure identity Verification Harnessing Biometrics and QR Code for Credential Authentication, Co PI: Riaz Ahmad Khan, JKST&IC (Amount of grant : ₹1 Lac), Start Date:26-02-2024; Project Status: Ongoing.



WORKSHOPS AND FDPS ORGANIZED 25













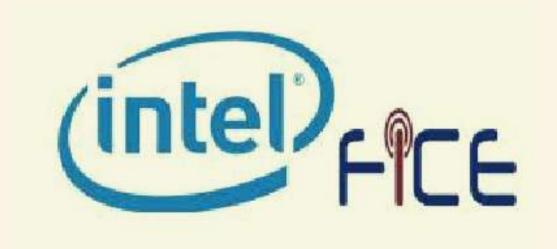


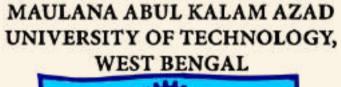
FUNCTIONAL MOUS & COLLABORATIONS

ACADEMIC & RESEARCH

















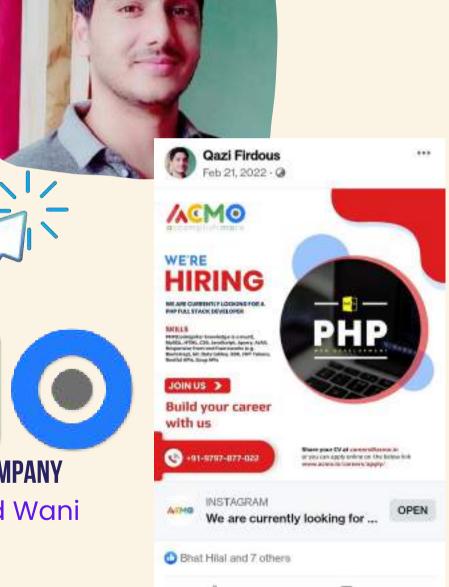
Mr S A Lone Assistant Professor, CSE

HIGH DENSITY APPLE ORCHARD AUTOMATION

STARTUPS









EXTENSION ACTIVITIES







JEEVITAM - PATH TO LIVELIHOOD WEBINARS



Islamic University of Science and Technology, Awantipora, Jammu & Kashmir in association with its Technology Partner Jeevitam presents

SILVER JUBLIEE WEBINAR - EMPOWERING THE YOUTH OF JAMMU & KASHMIR BY CREATING LIVELIHOOD OPPORTUNITIES, DEVELOPING NEW AGE SKILLS & SUSTAINABLE ENTREPRENEURSHIP









60-00

Retined Carper Service

Pabreja Officer EazyDiner

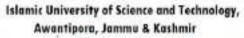
Dr Assif Mohd Assad Adil Rasik Shafi Rashid Javed Hamir

Shah Lawlakh Council of Student Council

of Student President 3rd Year 2nd Year 3rd Year 4th Ye Students 4th Year

Computer Science & Engineering Courtesy: Student Council Committee, IUST Moderators: Munish Chawle and KG Mohan | **** joethur.org

In Conversation With















WORKSHOP CO.





Auditorium

ICT enabled classrooms 03

Labs

06

Departmental Library

Software





COMPUTE NODE

03

CPU: 2 x Intel Xeon Gold 3.1G,

20Cores/40 Threads **RAM:** 8 x 64 GB **(512 GB) Storage:** 2 x 960 GB SSD

SATA

INTERCONNECT

- Mellanox 100 Gb/s
- Ethernet 1 Gb/s
- Ethernet 1 Gb/s for management

HIGH PERFORMANCE COMPUTING LAB

HEAD NODE

CPU: 2 x Intel Xeon Gold 3.1G,

20 Cores/40 Threads **RAM:** 16 x 64 GB **(1 TB)**

Storage: 2 x 960 GB SSD SATA 6 x 4 TB @7.2K RPM NLSAS

STORAGE NODE

02

CPU: Intel Xeon Gold 3.1G, 20Cores/40 Threads

RAM: 4 x 32 GB **(128 GB)**

Storage: 2 x 480 GB SSD SATA

Cluster Storage:

60 x 40 TB HDD @ 7.2K SAS 3 x 1.8 TB HDD @ 10K SAS

GPU NODE

03

CPU: 2 x Intel Xeon Gold 3.1G,

20Cores/40 Threads **RAM:** 8 x 64 GB **(512 GB)**

Storage: 2 x 960 GB SSD SATA

GPU: NVIDIA Tesla V100 32 GB

SOFTWARE

OS: CentOS

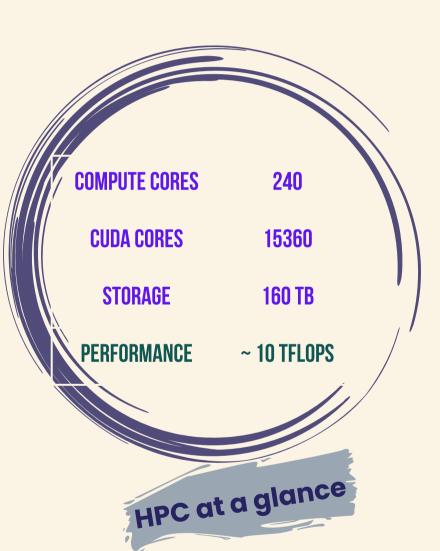
Scheduler: SLURM Job

Scheduler

Cluster Management
Software: Samooh

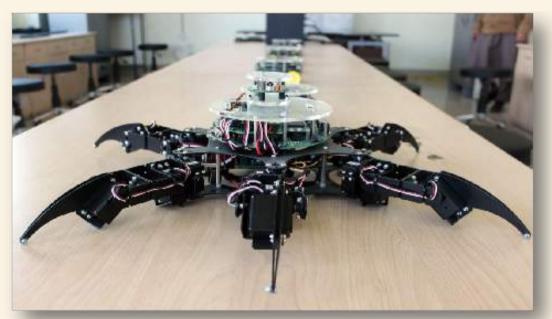
Software: Samoon

File System: PFS (Lustre)

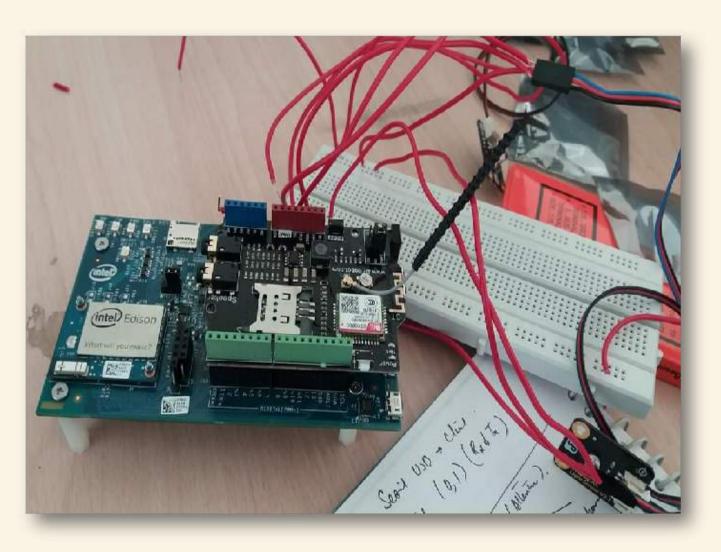




CYBER PHYSICAL SYSTEM, ROBOTICS, AND DRONE LAB









ACADEMIC ACHIEVEMENTS

STUDENT SUPPORT & PROGRESSION

Mentorship

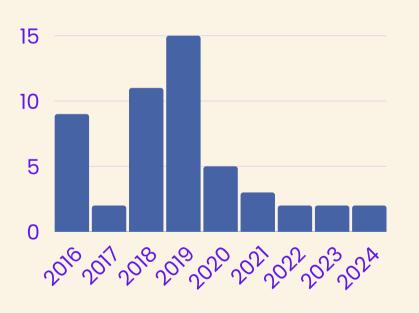
Guidance for career counselling

Frequent Alumni Meets

Industry Visits

Sports & Cultural Activities





More than 100 students
have qualified competitive
exams like GATE, GRE, IELTS,
TOEFL, NET, and SET

'60 IUST students qualify GATE 2019'

Srinagar, Mar 25: About 60 students from Islamic University of Science and Technology (IUST) Awantipora have performed fairly in the Graduate Aptitude Test Engineering GATE – 2019.

A statement said 60 students belonging to different branches of engineering have qualified GATE- 2019 examination.

"Last year 20 students had qualified GATE-2018," the spokesman said.

He said Amir Yaseen and Wahid Gulzar Bhat have secured All India Rank 126 and 152 in computer science and engineering branch.

Meanwhile Vice Chancellor IUST, Prof Mushtaq Ahmad Sidique has congratulated the qualifiers especially Amir Yaseen and Wahid Gulzar Bhat for bringing laurels to IUST.

Dean school of engineering and technology and Project coordinator TEQIP-III Prof. A H Moon also congratulated students.



PROMINENT ALUMNI



Neha Jain IT Professional Syntel, **India**



Imran Amin Lead Software Developer Al Rajhi Bank, **Saudi Arabia** Purdue University (NW), **USA**



Aakif Mehraj Lecturer



Insha Kanue Al Product Owner HRS Group, Germany



Muneer Ahmad Dedmari Al Solutions Architect NetApps, **Germany**



Basharat Bhat Chief Scientist Otago University, **New Zealand**



Younis Shah Associate Manager Accenture, **Singapore**



Bawna Bhat Sr Executive HR Operations Persolkelly, **India**



ALUMNI MEETS













SPORTS & CULTURAL ACTIVITIES



TT TOURNAMENT STUDENT SUMMIT FUN FEST



CSE LIFTS THE TITLE (FOOTBALL)

CRICKET TOURNAMENT

VARIOUS SPORTS' TEAMS



STUDENT ACTIVITIES



BASKETBALLL TOURNAMENT WINENRS



CSE LIFTS THE TITLE AGAIN (FOOTBALL)



DEEKSHARAMBH (SIP)

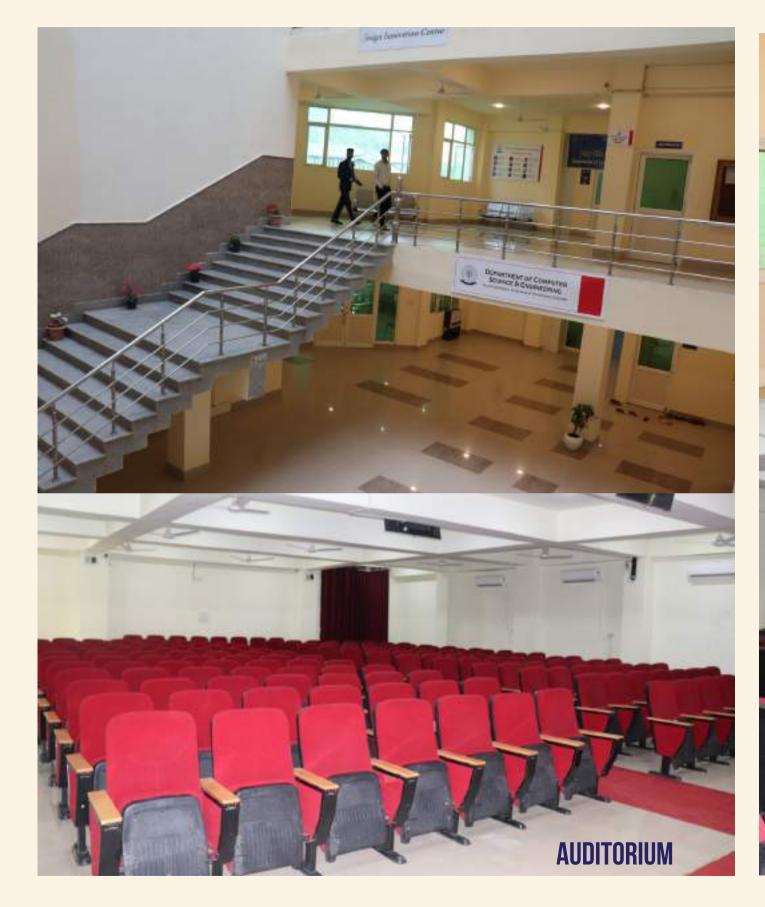


GOLD MEDALISTS



FUN FEST



















DECENTRALIZED & PARTICIPATORY MODE OF GOVERNANCE

REPRESENTATION OF DEPARTMENT IN VARIOUS STUDENT COMMITTEES

- Student Council
- Cultural Committee
- Innovation Club
- Ideation Club
- Entrepreneurship Club

FUNCTIONAL COMMITTEES

- DIQAU
- Departmental Monitoring Committee
- Examination Committee
- Academics Committee
- Departmental Research Committee
- Training and Placement Committee
- Finance Committees



ACADEMICS

- Centre for Innovation and Entrepreneurship Development(CIED)
- MOOCs Committee
- Training & Placement Committee
- Proctorial Team & Harassment
 Committee
- Induction Program
- Startup & Inovation grants
- Robust ERP
- Seed Grants for faculty

GREIVANCE REDRESSAL & FEEDBACK MECHANISM

- For addressing grievances related to:
 - Academics
 - Examination & Evaluation
 - Indiscipline Related Issues
 - Gender Specific Complaints
 - Topic wise feedback by students

GENDER SENSITIVITY

- CCTV for safety & security
- Mentor-Mentee Meets for Counseling
- Separate common rooms for boys and girls

Dept. of CSE, IUST



FUTURE PLAN(S)

• To collaborate with foreign Universities for faculty and student exchange programs.



Thank You