



# JOIN THE FUTURE

India's leading environs for world-class  
research and innovation.

**16**  
Academic  
Departments

**#1**  
Educational  
Institute in  
India

**Raftar**  
- Electric Racing  
Car Invented By  
IITM Students



INDIAN INSTITUTE OF TECHNOLOGY MADRAS





## INTRODUCTION

Indian Institute of Technology Madras (IITM) is one of the leading technology institutions in India. Established in the year 1959, IIT Madras seeks to attract the best students from diverse backgrounds and offer them an excellent educational experience.

The Institute has sixteen academic departments and a few advanced research centers in various disciplines of engineering and pure sciences, with nearly 100+ laboratories organized in a unique pattern of functioning. IITM has also introduced inter disciplinary research areas. A faculty of international repute, a brilliant student community, excellent technical & supporting staff and an effective administration have all contributed to the pre-eminent status of IIT Madras. The campus is located in the city of Chennai, previously known as Madras. Chennai is the state capital of Tamilnadu, a southern state in India.



ESTABLISHED  
IN 1959

#1

EDUCATIONAL  
INSTITUTE IN INDIA

100+

LABORATORIES

16

ACADEMIC  
DEPARTMENTS

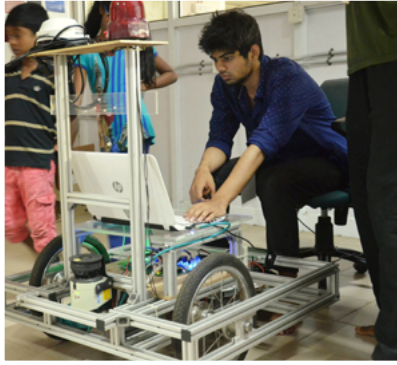
## MISSION

Excellence in teaching, developing human resources in the service of the nation, research, consultancy, and help to improve technical education in the country.

## VISION

To be an academic institution in dynamic equilibrium with its social, ecological and economic environment striving continuously for excellence in education, research and technological service to the nation.





## DEPARTMENTS

- Aerospace Engineering
- Applied Mechanics
- Biotechnology
- Chemical Engineering
- Chemistry | Civil Engineering
- Computer Science and Engineering
- Electrical Engineering
- Engineering Design
- Humanities and Social Sciences
- Management Studies
- Mathematics
- Mechanical Engineering
- Metallurgical and Materials Engineering
- Ocean Engineering
- Physics



## ACADEMIC PROGRAMS

### COURSE-BASED PROGRAMS

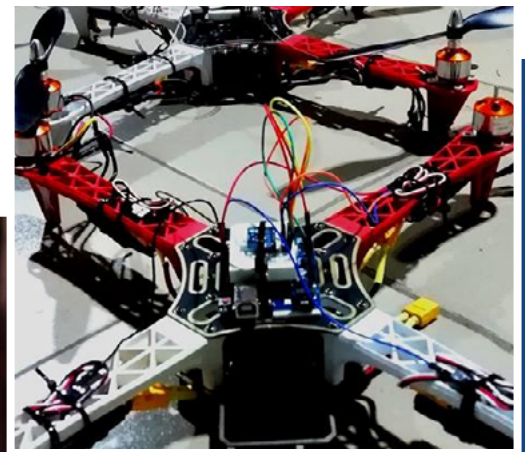
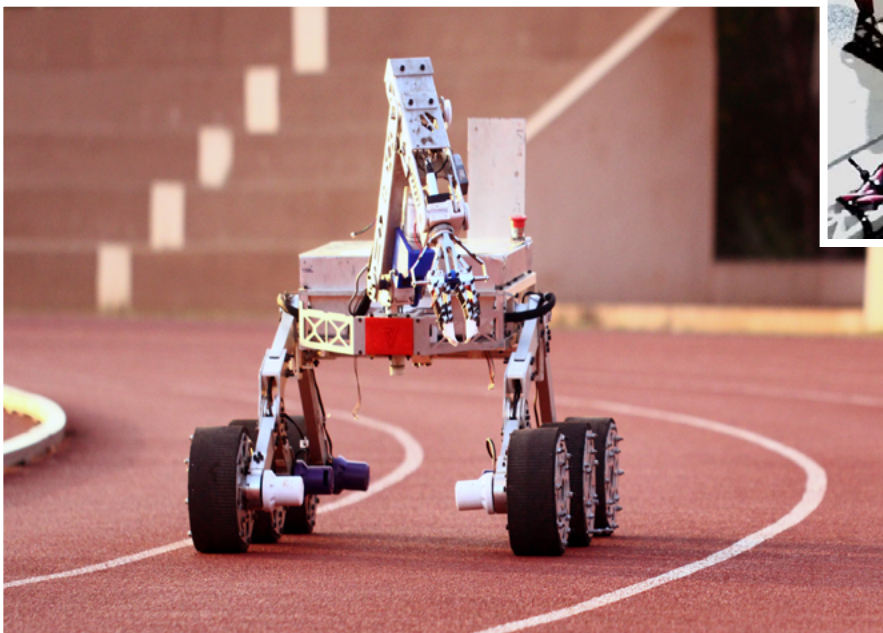
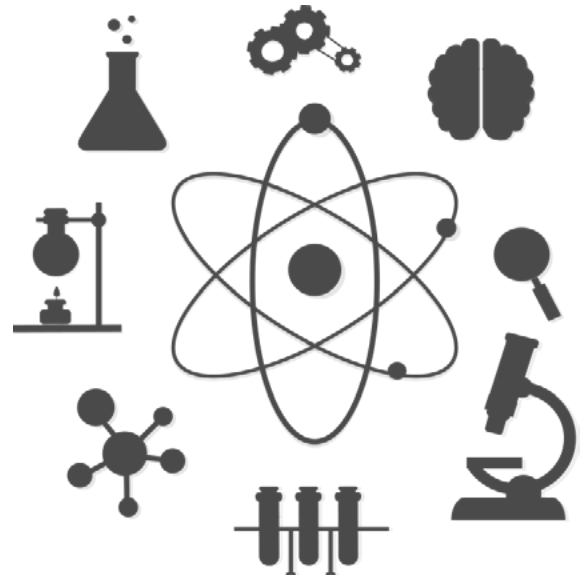
- 4-year Bachelor's - B. Tech
- 5-year Dual Degree - B.Tech and M.Tech
- 5-year Integrated - M.A and M.Sc
- 2-year Master's - M. Sc., M.B.A; M.Tech., M.Tech(UOP); M.Tech (Clinical Engineering)

### RESEARCH-BASED PROGRAMS

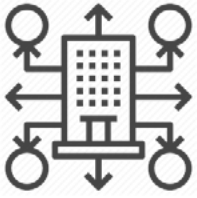
- M.S. - 2 to 3 years after B.Tech/ M.Sc
- Doctoral - 4 to 5 years after Masters

# INTERDISCIPLINARY RESEARCH AREAS

- **Combustion**
- **Atmospheric Science and Technology, including climate science and climate change**
- **Nano/ Bio materials and devices**
- **Sustainability**
  - All energy technologies including new and renewable
  - Transportation technologies including guidance and control
  - Heritage structures
- **Technology and Policy**
  - Education and ICT
  - Ethics
  - Technology management
  - Equity
- **Computational Sciences applied to**
  - Materials
  - System biology
  - Quantum computing
  - Analytics, simulation and optimization
- **Environmental science and engineering in the following (and not restricted to) areas**
  - Air quality and pollution
  - Water quality and pollution
  - Nuclear waste management
  - Carbon dioxide sequestration
- **MEMS, NEMS, Lab on a chip, micro fluidics and applications**
- **Bio- engineering – applications and devices**
- **Advanced sensors for national security and personal health**

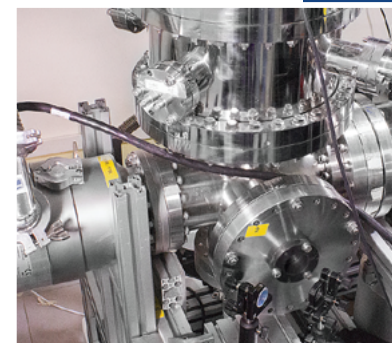






## CENTRES OF EXCELLENCE:

- National Technology Centre for Ports, Waterways and Coasts (NTCPWC)
- Robert Bosch Center for Data Science and Artificial Intelligence
- Centre of Excellence on Dam Safety & Dam Rehabilitation
- Centre of Excellence (CoE) in Advanced Materials and Manufacturing.
- Centre of Propulsion Technology (CoPT)
- Graphene Applications (TSAMRC)
- The Center for Excellence in Steel Technology (CoExiST)
- Industrial Internet of Things (IIT-GE)
- Center for Urbanization,Buildings and the Environment (CUBE)
- Applied Centre for Advanced Automotive Research (CAAR).
- Indian Solar Energy Harnessing Centre (ISEHC)
- Raghupathi Singhania Centre of Excellence for Tyre & Vehicle Mechanics
- Centre of Excellence in Urban Transport
- Centre of Decentralised Power Systems
- Centre for Non-Destructive Evaluation
- National Centre for Combustion R&D
- National Centre for Catalysis Research
- Centre for NEMS & Nanophotonics (CNNP)
- Healthcare Technology Innovation Centre( HTIC)
- Centre for Technology and Policy (CTaP)
- National Centre for Safety of Heritage Structures (NCSHS)
- Indo-German Centre for Sustainability (IGCS)
- China Studies Centre
- Reliance-IITM Telecom Centre of Excellence
- Centre for Functional Nanomaterials
- Thematic Unit of Excellence on Water
- Centre for Excellence in Wireless Technology (CEWIT)
- Centre of Excellence on Machine Tools and Production Technology (AMTDC)
- Centre of Excellence in Iron & Steel Technology (COEXIST)
- Centre for Computational Brain Research (CCBR)
- Interdisciplinary Laboratory in Data Sciences (ILDS)
- Initiative in Biological Systems Engineering (IBSE)
- Centre for Social Innovation & Entrepreneurship (CSIE)
- Centre for Railway Research (CRR)
- Centre for Battery Engineering and Electric Vehicles (CBEEV)
- TTK Centre for Rehabilitation Research and Device Development (R2D2)
- Thematic Unit of Excellence (TUE) on Water Purification using Nanotechnology



# UNIVERSITY PARTNERSHIPS



## RANKING



**ATAL RANKING OF INSTITUTIONS  
ON INNOVATION ACHIEVEMENTS**

**#1** position in the maiden edition



**NIRF RANKING - FRAMEWORK 2019**

**#1** Overall best university in India

**#1** Engineering University in India



**QS RANKING**

**#95** QS World University Ranking in  
Engineering and Technology

**#17** QS BRICS Ranking



18+

Joint Doctoral  
Programs

50+

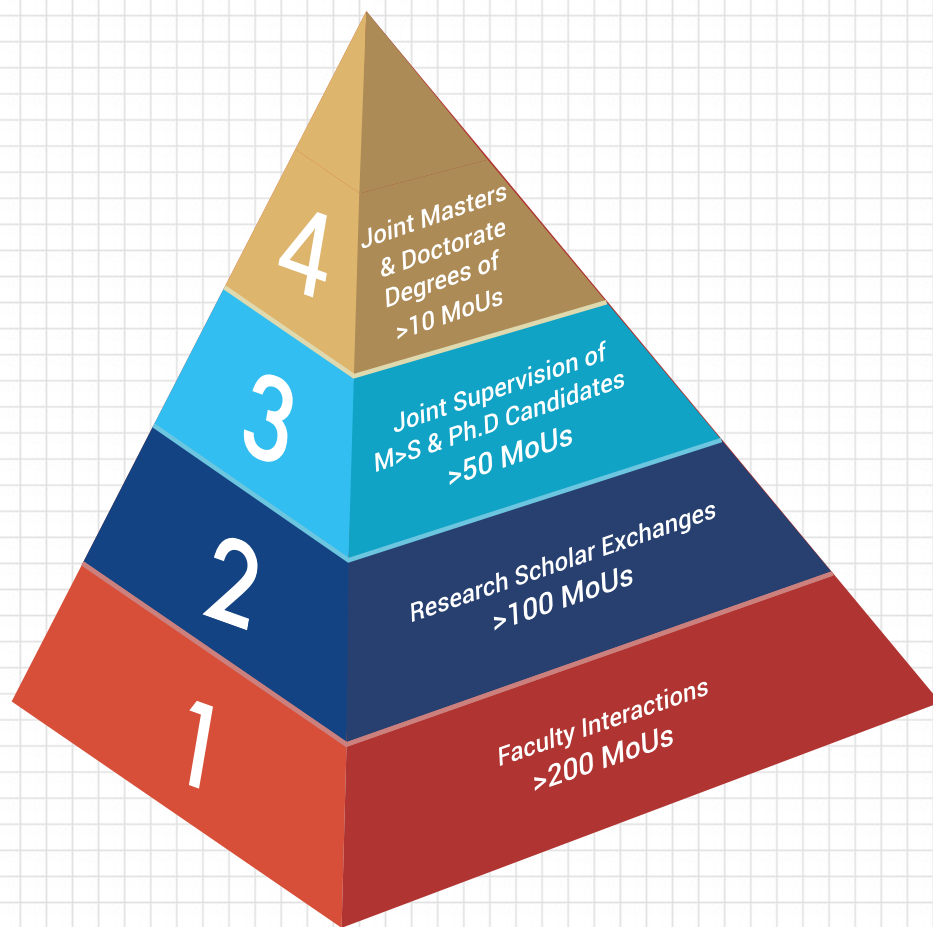
Joint Supervision  
Programs.

243+

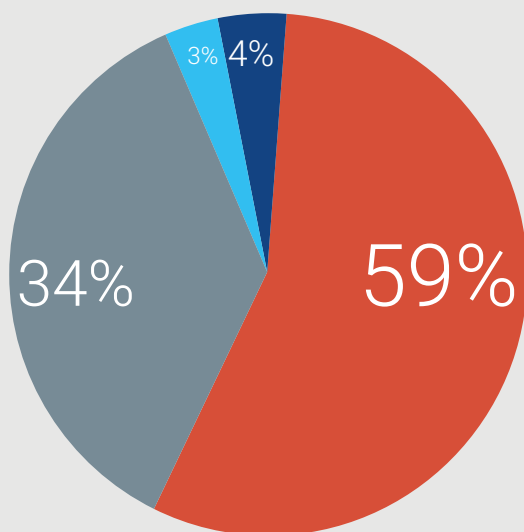
University  
Partnerships  
Worldwide



# IITM RESEARCH PHILOSOPHY

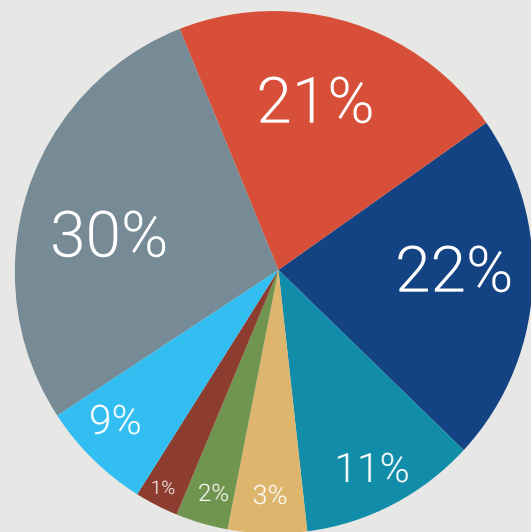


IITM TODAY



- Students
- Other Residents
- Faculty
- Staff

CURRENT STUDENT POPULATION



- PhD
- UG
- Dual Degree
- M.Tech
- M.S
- M.Sc
- M.A
- MBA



# FACT SHEET

## ACADEMIC INFORMATION

DURATION	SEMESTER 1	SEMESTER 2
Term	3rd Week of July to 1st Week of December	2nd Week of January to 2nd Week of May
Classes	Last Week of July to Last Week of November	Mid of January to Mid of May
Orientation	3rd Week of July	2nd Week of January
Exams	3rd & 4th Week of November	1st & 2nd Week of May

For exact Academic Calendar log on to <http://www.iitm.ac.in/calendar>

## FACULTY OFFERING EXCHANGE OPPORTUNITIES

Department	Bachelor/DD	Master	Research
Aerospace Engineering	✓	✓	✓
Applied Mechanics	✓	✓	✓
Bio Technology	✓	✓	✓
Chemical Engineering	✓	✓	✓
Chemistry		✓	✓
Civil Engineering	✓	✓	✓
Computer Science and Engineering	✓	✓	✓
Electrical Engineering	✓	✓	✓
Humanities and Social Sciences		✓	✓
Management Studies		✓	✓
Mathematics		✓	✓
Mechanical Engineering	✓	✓	✓
Metallurgical and Materials Engineering	✓	✓	✓
Ocean Engineering	✓	✓	✓
Physics	✓	✓	✓

For online Course Handbook log on to <http://www.iitm.ac.in/courses>

The attendance code and grade points followed at IITM are given below:

Attendance rounded to	Remarks	Code
> 95%	Very Good	VG
85 - 94%	Good	G
< 85%	Poor	P

P	Pass
F	Fail
W	Failure due to insufficient attendance
I	Incomplete (Subsequently to be changed into pass [E to S] or U grade in the semester)
X	Completed NSO/NCC/NSS
Y	Incomplete (in NSO/NCC/NSS)
S - E	Successful completion of the course

Grade	Grade Points
S	10
A	9
B	8
C	7
D	6
E	4
U	0

## CREDIT SYSTEM FOLLOWED IN IIT MADRAS

**1 credit = 50 min (1 credit hour) per week**

1 credit hour lecture needs 2 credit hours outside the classroom (for homework and tutorial etc)

So 3 lectures a week = 3 + (3×2) = 9 credit course

**2.5 hrs of lab work = 3 credits**

In any given semester, a student should not be required to register for more than 60 credits. This means a maximum academic time commitment of about 50 clock hours every week.

Language of Instruction: English

Language Courses:

German, French and Mandarin courses are offered as part of Humanities department courses

## APPLICATION PROCEDURE

**Last date for Application:**

SEMESTER 1 : 15<sup>th</sup> May

SEMESTER 2 : 15<sup>th</sup> November

**Required Documents:**

- Application Form
- Transcripts
- Nomination letter from International office
- Curriculum Vitae
- Passport copy



Online Application Link:

<http://www.oir.iitm.ac.in/web-form>

## OTHER INFORMATION

Estimated cost of living : ₹5000 / month

Health Insurance : ₹750 / semester

₹1500 / year



## MISCELLANEOUS

Accommodation arranged by partner University.

For additional information on accommodation write to Office of International Relations.

If accepted, Academic section will issue offer letter for Visa requirements.

IITM follows the semester system.

IITM follows the quarter system for MBA program, each quarter is usually of eight week duration.

**Quarter 1&5: July - September**

**Quarter 2&6: September - November**

**Quarter 3&7: January - March**

**Quarter 4&8: March - May**



# WORDS ABOUT THE EXPERIENCE IN IITM



*"I am impressed with the education system that it encourages students to go beyond bookish knowledge. It is good that the students are assessed through projects and presentations as well."*

- Sebastiao Quintas from IST Lisbon, **Portugal**



*"IITM is one of the most prestigious institutes in India and according to me deserves its reputation. The students are very skilled and studious and the courses have a high level. The theoretical aspects for most of the courses go really deep in to the subjects"*

- Thomas Bourany from Sciences Po, **France**



*"It was a fantastic experience and the people we met were very inspiring as well as the professors"*

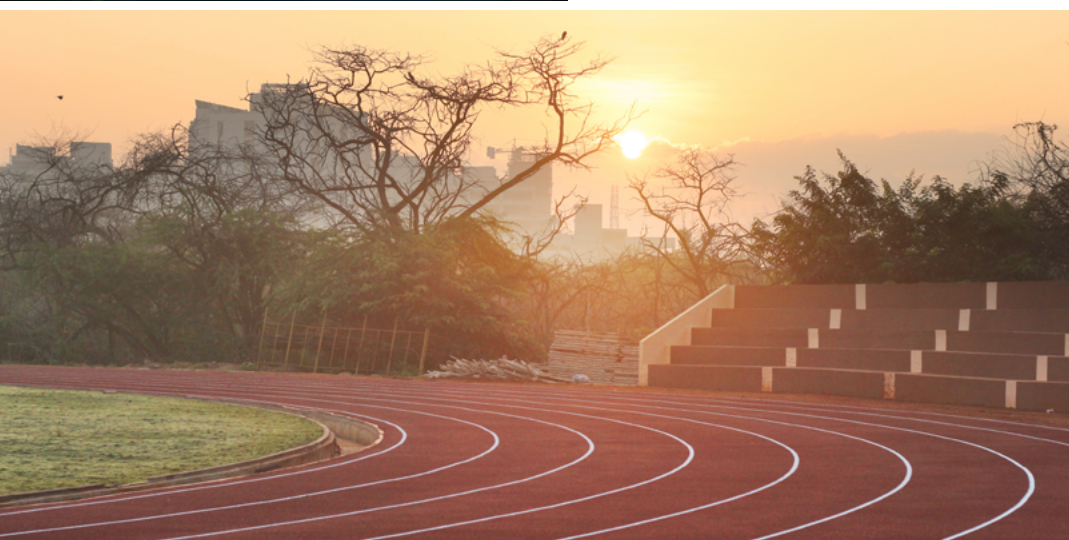
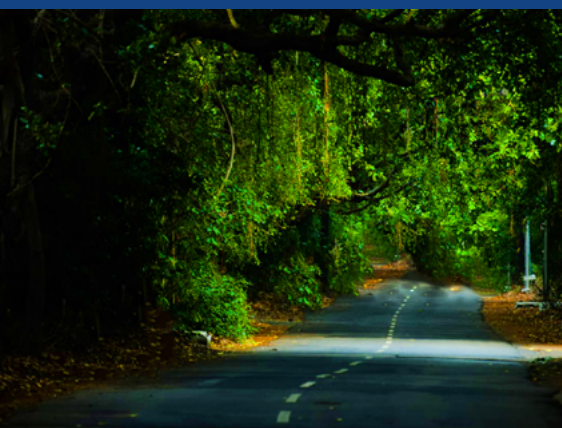
- Marie Sophie Hohner from University of Passau, **Germany**

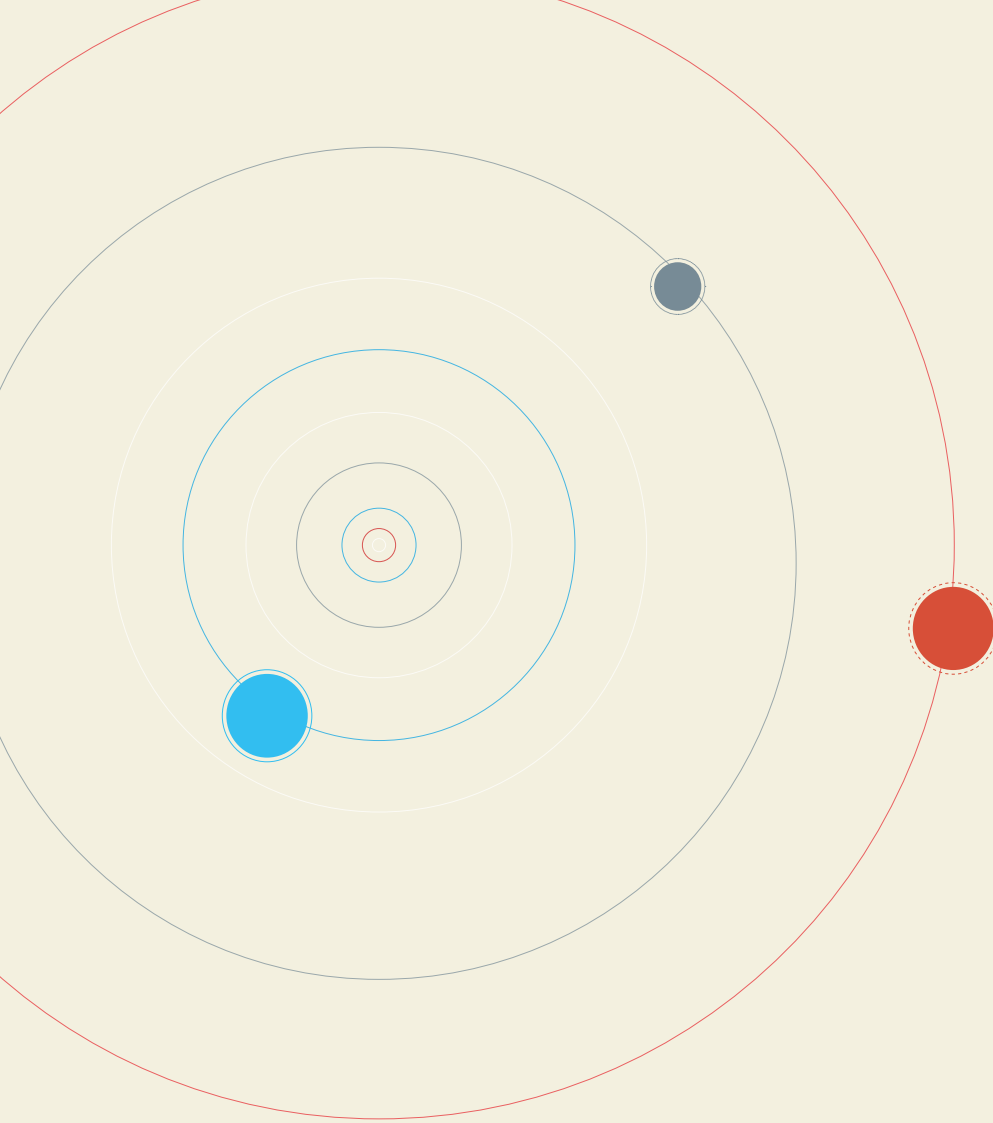






# GLIMPSE OF OUR CAMPUS





**Indian Institute of Technology Madras**  
**Chennai - 600036**  
**[www.iitm.ac.in](http://www.iitm.ac.in)**



For more information, please contact: Office of International Relations  
Tel: +91 44 22574926/4928 | E- mail: [oir@iitm.ac.in](mailto:oir@iitm.ac.in) | [www.oir.iitm.ac.in](http://www.oir.iitm.ac.in)



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