



## WHY STUDY AT BITS PILANI, DUBAI

- Get your career ready.
- Learn specialized courses
- BPDC reputation rivals with leading institution in UAE.
- Provides autonomy to learn with tutors on hand.
- One to one placement providers, interactive workshops.
- Collaborate with major industries with Practice School option, exclusively provided by BPDC.
- Transition learning from classroom to industrial workplace.
- BPDC, a Green campus and its infrastructure will support and inspire you to move on with real-time projects.
- High end set up of research labs
- International exposure to students from India
- Opportunities to extend research towards earning a Doctoral degree.
- Spacious Library with adequate study area.
- Library offers open access to research papers from IEEE transactions, ACM, EBBSCO data base, MIT e-books.
- Well qualified instructors to guide.
- On campus hostel facility with separate hostels for girls and boys
- BPDC ensures attending live lectures from BITS, professors from India.
- Signed MOU and works in collaboration with foreign universities.

## About Us

BITS Pilani, Dubai Campus is the international campus of Birla Institute of Technology and Science, Pilani, India and is located at the Dubai International Academic City. Set up in the year 2000, it is among the pioneer institutions in Dubai, and exclusively dedicated to offering quality engineering and technology education. It attracts a diverse student population from UAE, other GCC countries, Asia, Africa and Far East.

BITS Pilani, Dubai Campus is approved by University Grants Commission and Ministry of Human Resource Development, Government of India and is permitted by the Knowledge and Human Development Authority (KHDA), Government of Dubai.

## BITS Pilani, Dubai Campus

Dubai International Academic City  
P.O. Box: 345055,  
Dubai, UAE

Working Days: Sunday to Thursday  
Working Time: 7:30 am - 3:30 pm  
<https://www.bits-pilani.ac.in/dubai>

## Birla Institute of Technology And Science, Pilani

### Dubai Campus



## Department of Computer Science

### Higher Degree Brochure (M.E and Ph.D)

2020-2021

innovate

achieve

lead

## Department of Computer Science

An extensive and dominant department in BPDC with higher student count and with knowledgeable educators. It offers a wide range of fundamental and contemporary courses. The department offers three degrees: BE, M.E (Software Systems), Ph.D.

### Laboratories

Cutting edge software tools like

- Enterprise Architect
- Altova enterprise XML
- Netsim simulator
- High performance GPU NVIDIA based workstations to supplement the practical assignments of the courses machine learning
- Powerful embedded system with necessary sensors

### Equipments

- Machine learning: High End GPU for Deep Learning, 480GB SAS, 2.4TB Hard Drive, NVIDIA Tesla V100 32GB GPU
- IoT: Raspberry Pi 3-model B+ single board computer +Various Sensorsr kits
- Design: Adobe Creative
- Network Simulation: Netsim Academic
- Software Lifecycle Modelling Tool: Enterprise Architect
- Mathematical Simulation Tools: Mathematica Software
- Multimedia tools and peripherals with VR and AR devices and software

## APPLY NOW

<https://www.bits-pilani.ac.in/Dubai/admissionsOverview>

### Research Addendum

BPDC caters the need of researchers towards completing Ph.D.

Encourage Full-Time and Part-Time Ph.D Scholars

Novel research ideas extended for publication in journal with expert guidance

Research fields: Machine Learning, Artificial Intelligence, Internet of Things, Wireless Networks, Multimedia Services, Cloud Computing, Software Engineering

### Higher Degree (H.D) Programs

**Master in Software Engineering** with two options:

Duration: [2 yrs]

12 courses [3 semesters]

- With Practice School:
  - + Internship in industry [1 semester]
- With Dissertation:
  - + Dissertation [1 semester]

### Doctorate of Philosophy

Duration: [3 to 5 yrs]

- Full-Time: On campus, regular students
- Part-Time: Working professionals in UAE and Industry aspirants can register.

Additional charges will be levied on student visa

### High Degree Eligibility

60% or 6 CGPA as bottom line score in Bachelor of Computer Science Engineering or Information Technology domain or other inter-related disciplines in engineering (B.E., M.Sc.)

### Ph.D Eligibility

60% or 6 CGPA as bottom line score in Master of Computer Science Engineering or other inter related disciplines in Master's degree.

### Fee Structure

High Degree Course - 15500 AED per semester. Added benefit of 20% waive off for Merit-based scholarship for High Degree program.

PhD course - 2400 AED per semester for Full-Time and 3600 AED per semester for Part-Time.

### Core Courses

Data Mining, Object Oriented Analysis and Design, Data Ware Housing, Software Engineering and Management, Software Architecture.

### Elective Courses

Machine Learning, Real-Time Systems, Multimedia Computing, Computational Geometry, Artificial Intelligence, Internetworking Technologies, Parallel Computing

### Recruiters

Google, PwC, Fujisoft Technology LLC, Careem, Help AG, Emirates Skycargo, Sapient, Zomato, IBM, UAE Exchange, Yahoo, Deloitte, ESRI, Emerson, OYO.



## Faculty Profiles

### Dr. S. Vadivel

*Cloud computing, Web services*

### Dr. B. Vijayakumar

*Distributed Data Systems, Multimedia Systems*

### Dr. V. Santhosh Kumar

*Distributed Systems, High Power Computing*

### Dr. Sujala D. Shetty

*Big Data, Artificial Intelligence*

### Dr. M. Raja

*Wireless Communication, Networking*

### Dr. Siddhaling Urolagin

*Document image analysis, Pattern recognition, Bioinformatics*

### Dr. J. Angel Arul Jothi

*Image processing, Pattern Recognition, Data Mining*

### Dr. Razia Sulthana

*Machine Learning, Ontology, Recommendation System, Fuzzy Rules*

### Dr. Rahul Chegot Sankaramenon

*Graph Theory, Algorithm Analysis, Combinatorics*

### Dr. Tamizharasan Periyasamy

*Multi-core Architectures, High-Performance Computing, Deep Learning*

### Mr. Gaurav Saxena

*Nature Inspired Computing, Optimization Algorithms*

### Ms. Sapna Sadhwani

*Computer Networking, Network Security*

“

Software Systems has been an excellent course managed by highly competent professors and faculty members. I received tremendous support from both teachers and fellow students and the quality of course work and assignments helped me raise the bar on my technical skills. I am truly grateful for the knowledge and experience imparted by this course.



#### Kavita Maji

Student, M.E (Software Systems)  
Senior Software Developer, Emirates NBD

“

The best part about the HD program in BITS is diversity in the classroom, being surrounded by freshmen to experienced colleagues gives a different perspective to approach problems and assignments. Professors and faculty members extend tremendous support and ensure the overall development of students. It was an unforgettable journey indeed!



#### Rishabh Rathod

Student, M.E (Software Systems)  
Intern (PwC - Dubai)

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The best thing about BITS Pilani Higher Degree program is it helps you to push to your limits and succeed both academically and professionally. The department faculties are very knowledgeable and supportive to student's goal. I had a great experience with the faculties learning new concepts and working on International Journal Publication. I'm extremely proud to be a part of a prestigious institution.



#### Anith Kumar Ramanathan

Business Analyst – Ports & Logistics |  
Digital Transformation | Banking and  
Financial Sectors

“

The most interesting part for me was the practical assignments where I challenged myself to solve problems with industry leading tools in the market. The Professors at BITS are really helpful and challenge students to reach another level during Dissertation



#### Pragya Garg

CEO & Co-Founder  
PiFi Technologies LLC

“

It was my dream to get my doctoral degree from a world class institution. The highly qualified faculty members, well equipped labs, a central library with quality international journals, the infrastructure and the total ambience helped me a lot to achieve my dream.



#### Dr. Praseetha V. M.

Associate Professor,  
Department of Computer Science and  
Engineering,  
St. Joseph's College of Engineering and  
Technology, Palai, Kottayam, Kerala.

“

BITS Pilani Dubai gives the feeling of staying at home with vast green serenity similar to India. It is not only a space for learning instead it gives us to explore our strength and capabilities through various activities. Sincere thanks to the professors for their guidance and support and make our journey smooth



#### Swati Sucharita Beuria

IT Consultant  
Crowe Mak Limited, DIFC, Dubai