



M.Tech. Cloud Computing For Working Professionals



BITS Pilani
Pilani | Dubai | Goa | Hyderabad | Mumbai
**WORK INTEGRATED
LEARNING PROGRAMMES**

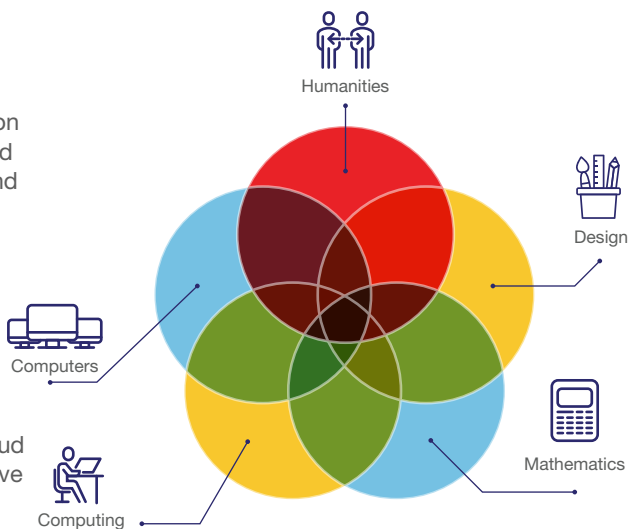
HCLTech

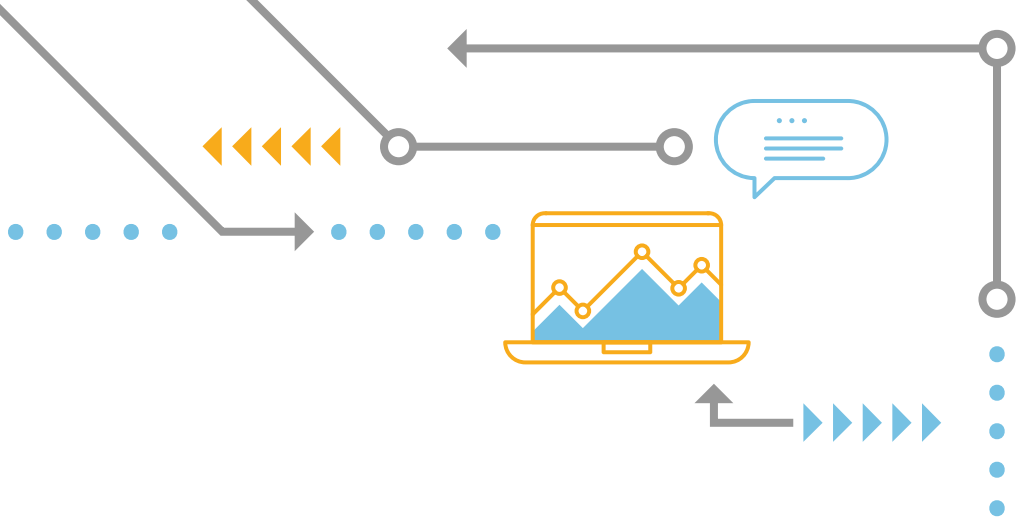


PROGRAM INTRODUCTION

Cloud computing adoption is poised to be a major driver of the Indian economy by 2026, with projections of a \$380 billion GDP boost and the creation of 14 million jobs within the next 5 years, fueled by a growing digital population and increased digitization.

To seize these opportunities, consider M.Tech. Cloud Computing, a four-semester programme for working professionals, offering comprehensive expertise in Big Data, Distributed Computing, Cloud Network and Security, Cloud-native application development, Cloud Economics, and more.





PROGRAMME HIGHLIGHTS

- ▶ 4 semester programme with flexible classes.
- ▶ UGC approved programme for Working professionals.
- ▶ Pursue the programme without any career break.
- ▶ Online classes conducted mostly on weekends.
- ▶ Employs Continuous Evaluation to provide ongoing feedback and support.
- ▶ Gain expertise in Cloud-native app design, APIs, and Cloud platform architecture.
- ▶ Blend of classroom and experiential learning.
- ▶ Become a part of Elite and Global BITS Pilani Alumni community
- ▶ Fee submission option using easy - EMI with 0% interest and 0 down payment.





PROGRAMME OBJECTIVES

- ▶ Grasp Cloud platform design choices from a provider viewpoint.
- ▶ Learn Cloud-native app design and APIs with practical experience.
- ▶ Analyze, apply best practices for Cloud app deployment, management, and operations.
- ▶ Interpret pricing, evaluate cost optimization, and design technical solutions.
- ▶ Address security issues and apply best practices for Cloud apps and data.

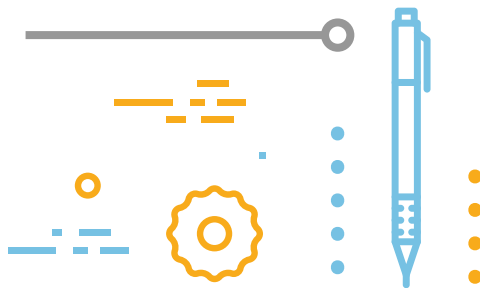


STUDENT LEARNING OUTCOMES

UPON PROGRAMME COMPLETION, LEARNERS WILL BE ABLE TO:

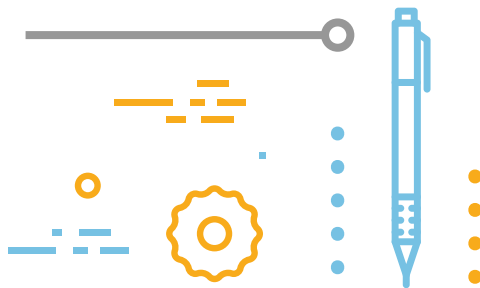
- ▶ Design and configure Cloud infrastructure and platform services.
- ▶ Create Cloud-native app prototypes or migrate existing solutions.
- ▶ Manage the entire app lifecycle from development to operations.
- ▶ Offer security recommendations for use cases.
- ▶ Assess Cloud service fitment and utilize API-enabled services.
- ▶ Design cost-optimized solutions based on use cases and billing plans.

PROGRAMME CURRICULUM



First Semester	Second Semester
Big Data Systems	Cloud Infrastructure and Systems Software
Cloud Computing	Elective 1
Distributed Computing	Elective 2
Network Fundamentals for Cloud	Elective 3
Third Semester	Fourth Semester
Elective 4	Dissertation
Elective 5	
Elective 6	
Elective 7	
Electives	
Scalable Services	Design and Operation of Data Centers
Security Fundamentals for Cloud	Data Storage Technology and Networks
Cloud Economics	Stream Processing and Analytics
Introduction to Data Science	Edge Computing
API-based Cloud Native Solutions	Introduction to Parallel and Distributed Programming
Data Warehousing	Introduction to AI Systems
DevOps for Cloud	AI Workloads on the Cloud
Secure Software Engineering	

Note: Choice of Electives is made available to enrolled students at the beginning of each semester. A limited selection of Electives will be offered at the discretion of the Institute.



Electives	
Secure AIOps for Cloud Management	Machine Learning on the Edge
Cloud Sustainability and Green Computing	Software Defined Networks
Statistical Modeling of Cloud Systems	Cyber Laws and IPR Protection
Mini-Project	Platform Engineering



Note: Choice of Electives is made available to enrolled students at the beginning of each semester. A limited selection of Electives will be offered at the discretion of the Institute.



LEARNING METHODOLOGY



Attend online lectures over weekends

- Lectures are conducted live via online classes. These lectures can be attended via the internet using a computer from any location. These online classrooms offer similar levels of interactivity as regular classrooms at the BITS Pilani campus.
- The class schedule is announced within 1 week of completion of the admission process.
- The online lectures are conducted usually over weekends for a total of 7-8 hours per week. If you miss a lecture, you can also access the recorded lecture on the internet.



DIGITAL LEARNING

- Learners can access engaging learning material at their own pace which lecture videos, student notes, curated content etc. for select courses, through a learning management platform that is engaging and mobile-friendly.



EXPERIENTIAL LEARNING & LABS

The program prioritizes experiential learning, enabling learners to apply classroom concepts in simulated and real work scenarios through remote and virtual lab exercises.

Simulation Tools, Platforms & Environments: The programme makes use of simulation software, open source tools/frameworks and Public Cloud based deployment environments for hands-on labs and assignments.



PROJECT WORK

During the final semester participants carryout a semester-long intensive project work applying the various concepts learnt throughout the program guided by the organisation mentor and supervisor. Participants are provided access to virtual labs where applicable, and faculty expertise to support the project work.



EXAMINATIONS & CONTINUOUS ASSESSMENT

The learners' performance is assessed continuously throughout the semester using various tools such as quiz, assignments, mid-semester and comprehensive exams. The assessment results are shared with the learners to improve their performance.

Each course will entail a minimum of 1 Assignment / Quiz, a mid-semester exam and a final comprehensive exam. Your semester calendar will clearly indicate the dates of the mid-semester and comprehensive exams. Typically, a mid-semester or comprehensive examination for a course is of 2-3 hours duration. The examinations are typically conducted over a weekend, i.e. Saturday and Sunday. These exams will be conducted either at the learners' office premises, or at another suitable location. Details regarding the exam location will be communicated at the beginning of the semester.

ELIGIBILITY CRITERIA

- ▶ Employed professionals holding a B.E./B.Tech./M.Sc./MCA with at least 60% aggregate marks and minimum one-year relevant work experience after the completion of the degree.
- ▶ Applicants must have a minimum of One Year of work experience within HCLTech with a minimum annual rating of "Good & above" in the last appraisal cycle.
- ▶ Experience in computing, especially systems and programming is expected.

FEE STRUCTURE

The following fees schedule is applicable for candidates seeking new admission during the academic year 2026-27.

Application Fees (one time)	:INR 1,500
Admission Fees (one time)	:INR 18,500
Semester Fees (per semester)	:INR 73,100



Note: It is strongly advised to refer and check HCL's policy details and other Eligibility Criteria of the programme before applying, as all fees are non-refundable.

Note: The above are only the minimum criteria to apply. The final decision to offer admission to an applicant rests with BITS Pilani which will be made based on an overall review of your application information.



HOW TO APPLY

- ▶ [Click here](#) to visit the Online Application Center. Create your login at the Online Application Center by entering your official HCL Email ID only and create a password of your choice. Once your login has been created, you can anytime access the Online Application Center using your official email ID and password.
- ▶ Begin by clicking on Step 1 - 'Fill/ Edit and Submit Application Form'. This will enable you to select the programme of your choice. After you have chosen your programme, you will be asked to fill your details in an online form. You must fill all details and press 'Submit' button given at the bottom of the form.
- ▶ Now, click on 'Pay Application Fee' to pay INR 1,500/- using Netbanking/ Debit Card/ Credit Card
- ▶ Finally, click on 'Upload & Submit All Required Documents'. This will allow you to upload one-by-one all the mandatory supporting documents such academic certificates and transcripts, photograph, etc. and complete the application process. Acceptable file formats for uploading these documents are .DOC, .DOCX, .PDF, .ZIP and .JPEG
- ▶ Upon receipt of your Application Form and all other enclosures, the Admissions Cell will scrutinise them for completeness, accuracy and eligibility.
- ▶ Admission Cell will intimate selected candidates by email within two weeks of submission of application with all supporting documents. The selection status can also be checked by logging in to the Online Application Centre.



DISCLAIMER

Ever since it was declared as a Deemed to be University in 1964, BITS Pilani has been offering higher education programmes in science and technology, and has earned an enviable reputation for its innovations in this sphere. The Work Integrated Learning Programmes (WILP) of BITS Pilani constitutes a unique set of educational offerings for working professionals. These programmes, which BITS began to offer in 1979, have, over the years, evolved along the lines envisaged in the National Policy on Education, 1986.

The WILP are rigorous higher education programmes in technology areas, designed keeping the evolving needs of industry in view, and meant for working professionals in their respective domains. The very intent is to deliver the education at the workplace, in order that the greatest degree

of work integration of the education is achieved, and thus the WILP are very distinct in philosophy and pedagogy from open, distance learning programmes. Though it is incorrect and improper, at times the WILP are compared to ODL programmes. Accordingly, it has been our constant endeavor to engage with the regulator, and provide all necessary information about these programmes.

The WILP have been well received, and accepted by industry, because of the high quality of the programmes in terms of the curriculum and the instruction, and also because of the high degree of work integration, which results not only in up gradation of knowledge, but also in up skilling, and productivity increase.