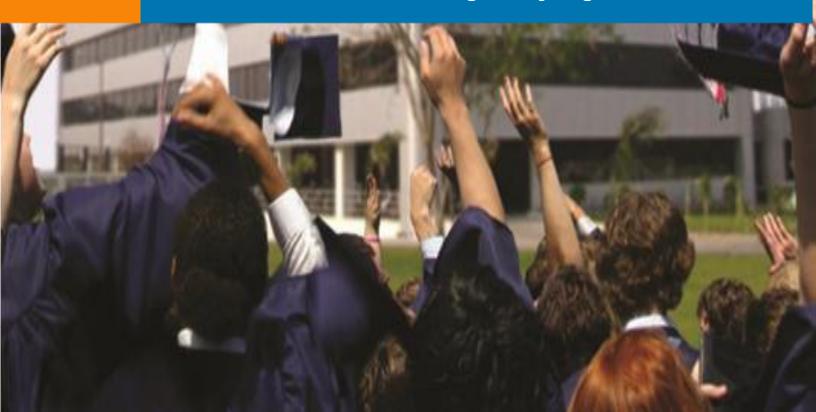






Broaden your horizons...
Pursue your Masters
while working at Cybage!







## BITS Pilani's Off-Campus Work Integrated Learning Programme

Cybage in collaboration with
Birla Institute of Technology & Science, Pilani
Announces **MTech Data Science & Engineering**2 years (4 semesters) Off-Campus Work Integrated Learning & Collaborative,
Post Graduate Programme

## **BATCH 9 | March 2021- February 2023**

	Cybage Software Pvt. Ltd. and BITS are fostering collaboration between the two institutions to promote academic and research interactions.  This programme was launched by BITS in the year 1997 to address the HRD needs of the IT Industry and is implementing this program in most of the top Indian companies.  Candidates/students play the role of a full-time employee and student simultaneously due to the judicious work study integration.		
Premise	BITS operates an off-campus Centre at CSPL, Pune and runs the educational programme to meet the human resources development needs of Cybage, leading to specific degree of BITS through its Off-Campus Work Integrated Learning and Collaborative Programme. This programme has the same rigor and standards as those offered on-campus, and is equivalent to the corresponding degrees offered on-campus. The educational programmes conducted under this collaborative arrangement will offer Cybage employees an opportunity to:  1. Synergize theory and practice on a sustained basis. 2. Be multi-skilled with exposure to upcoming technological areas. 3. Appreciate key management concepts 4. Participate better in organizational initiatives, improve their perspective, and provide meaningful insights. 5. Enhance their academic qualifications.		
PG Degree	MTech Data Science & Engineering, a post graduate degree programme which is globally recognized.		
Work-Integrated Learning Programs	Considering the equal involvement of the industry and the university in this unique collaborative work-integrated learning effort, the students are expected to conduct themselves as working professionals. They will be governed by the Academic Regulations of BITS Pilani, as well as by the service rules stipulated by Cybage.		
Minimum Qualification	Employed professionals holding B.E. / B.Tech. / MCA / M.Sc. or equivalent with at least 60% aggregate marks or more in their qualifying exam.  Applicants should possess basic programming knowledge and adequate background in Mathematics.		
Eligibility Criteria	Minimum 1 year of experience at Cybage.		

## Four Semesters with three semesters of course work followed by one semester of Dissertation. Each Semester has four courses, which would be conducted online by BITS faculty. Students can login into the portal to attend the live lecture by using their BITS official ID as per the schedule.

## **Program Structure**

These lectures can be attended over the internet from any location. In case you miss a session, recorded session would be available for future reference.

Students also get the facility to interact real time with the faculty during the Live sessions. Due to some reason, if faculty could not attend to the query, they can be contacted lateron over email or phone for the same.

Course Syllabus	Semester	Course	
	<b>First Year</b> First Semester	Data Mining	
		Mathematical Foundations for Data Science	
		Data Structures and Algorithms Design	
		Computer Organization and Systems Software	
	First Year Second Semester	Introduction to Statistical Methods	
		Introduction to Data Science	
		Machine Learning	
		Elective1	
	Second Year First Semester	Elective 2	
		Elective 3	
		Elective 4	
		Elective 5	
	Second Year Second Semester	Dissertation	

	Electives:		
	<ul> <li>Deep Learning</li> <li>Natural Language Processing</li> <li>Artificial and Computational Intelligence</li> <li>Real time-Analytics</li> <li>Data Visualization &amp; Interpretation</li> <li>Graphs - Algorithms &amp; Mining</li> <li>Optimization Methods for Analytics</li> <li>Big Data Systems</li> <li>Information Retrieval</li> <li>Probabilistic Graphical Models</li> <li>Data Warehousing</li> <li>Systems for Data Analytics</li> <li>Ethics for Data Science</li> <li>Machine Learning</li> <li>Distributed Data System</li> <li>Stream Processing &amp; Analytics</li> </ul> *If we get 30 or more registrations, Cybage will finalize on the electives, taking into consideration the industry relevance.		
Evaluation scheme	<ul> <li>Mid-Semester Test (Closed Book)</li> <li>Comprehensive Examination (Open Book)</li> <li>Assignment / Quiz/ Lab</li> <li>Continuous system of internal evaluation</li> <li>Evaluated answer scripts are returned to students after explaining the solutions and marking scheme</li> <li>Requests for reevaluation from students are accommodated.</li> </ul> Note: If the candidate is unable to appear for an exam due to an onsite visit/personal engagements, there is a provision of appearing for the exam at a later date.		
Grading Scheme	Concept of relative grading The Cumulative Grade Point Average (CGPA) on a 10-point scale is used to describe the overall performance of a student in all courses for which LETTER GRADES are awarded.		
Fee Structure	Application fee : Rs.1, 500/- (Onetime, Non-refundable) Admission fee : Rs.16,500/- (Onetime) Semester fee : Rs.60,000/- (Per Semester) (Total fees for the 1st semester is Rs.78,000/-)		

Mode of payment  Admission fees + 76,500/- Semester fees 76,500/-	following wa	<b>/</b> :						
Mode of payment  Admission fees + 76 500/-			The fee submission is to be done in the following way:					
/6 500/-	Application Fees 1500/- <b>By Cash</b> To be hand Training de							
	/6 500/-   Miling =							
Reimbursement Policy  fees i.e. Semester fees (excludes the ap shall be refunded to the employee afte date of announcement/declaration of the bank account along with the immediate r notice period at the time of disbursement *Income Tax would be charged as per the ap  Please note that financial assistance and	On successful completion of the degree program, Cybage shall reimburse 50% course fees i.e. Semester fees (excludes the application and admission fees). This course fee shall be refunded to the employee after completion of 12 months of service, from the date of announcement/declaration of the final results. The amount will be credited to the bank account along with the immediate next salary, provided the employee is not serving notice period at the time of disbursement.  *Income Tax would be charged as per the applicable rate on the reimbursement amount.  Please note that financial assistance and reimbursement are two separate artifacts and in no way are they connected to each other.							
Milestone	Milestone							
1 <sup>st</sup> Announcement Mailer	1 <sup>st</sup> Announcement Mailer							
2 <sup>nd</sup> Reminder mail	2 <sup>nd</sup> Reminder mail							
Open house by BITS Faculty	Open house by BITS Faculty							
3 <sup>rd</sup> & Last reminder mail	3 <sup>rd</sup> & Last reminder mail							
, ,	Convey your willingness to enroll for the course							
Important Dates  Notification to those employees shortliste	Notification to those employees shortlisted by BITS							
Signed Undertaking by the employee.	Submission of Application fee: Rs. 1,500/- (non-refundable) Signed Undertaking by the employee. Loan application (if planning to avail the loan facility)							
	Submission of Online Admission fees [comprising Admission fee: Rs. 16,500/- & Semester fee: Rs. 60,000/-]							
Tentative Course Commencement	Tentative Course Commencement							

Terms and conditions	Applicant would have to forfeit the application fees (Rs.1,500/-) in case he/she drops out and this amount is non- refundable. If a participant ceases to be a Cybagian or wants to quit mid-way, no amount will be Refunded nor will he/she would be able to continue with course. In such a case, the participant needs to intimate <a href="mailto:bitsce@cybage.com">bitsce@cybage.com</a> and <a href="mailto:vijayalakshmi_anand@pilani.bits-pilani.ac.in">vijayalakshmi_anand@pilani.bits-pilani.ac.in</a> Bits Pilani stating the reason for dis-continuing the course.			
Nomination and selection Process	Interested Cybagians need to confirm their nominations by filling up the online enrollment form by <b>Wednesday</b> , <b>10</b> <sup>th</sup> <b>Mar'21</b> Those who are shortlisted shall receive the notification mail by <b>Friday</b> , <b>12</b> <sup>th</sup> <b>Mar'21</b> .			
	Question	Answer		
FAQs	In case one resigns during the progress of this course, can one continue?	The course is a strategic tie-up between BITs and CSPL. In case you cease to be an employee of Cybage, you cease to be a student of BITs. The fees are not refunded - partial or full.		
	Is there any provision of appearing for an examination at a later date, in case one is unable to appear for the exam on the scheduled date, on account of personal engagements/onsite visits, and so on?	Yes, there is a re-examination system once in six months (termed as "make-up exams"). The schedule is announced prior to the exams.		
	What is the minimum attendance stipulated?	Employees are expected to maintain minimum attendance of at least 75%.		
	What if I am not able to attend the online lecture at the given time?	In case you miss a session, you can also access the recorded lecture on the internet via eLearn and Taxila.		
	Do I need to come in office to attend the Online lectures.	No, it is not necessary for you to come office to attend the online lectures. You can go through it from wherever it is convenient (make sure you have internet connectivity)		
	Where the exams would be conducted?	The exams would be conducted online or —  For Pune resources- at Bits center, Pune For Hyderabad resources- Bits center at Hyderabad For Gandhinagar resources- To travel to either to Pune center/Hyderabad center *Travel cost will be self-borne		
BITS Pilani Website	http://www.bits-pilani.ac.in			
BITS POCs	Mr. Gaurav Gaba : <a href="mailto:gaba@hyderabad.bits-pilani.ac.in">gaurav.gaba@hyderabad.bits-pilani.ac.in</a> Prof. Vijayalakshmi : <a href="mailto:vijayalakshmi_anand@pilani.bits-pilani.ac.in">vijayalakshmi_anand@pilani.bits-pilani.ac.in</a>			