

About KLE Technological University

KLE Technological University has its roots in one of the premier engineering institute of Karnataka, B.V. Bhoomaraddi College of Engineering and Technology (BVB), a prestigious engineering college in Hubli. The founding organization KLE Society, Belgaum, established BVB college in 1947 with an aspiration of creating an institute that would lay the foundation of modern engineering education in northern region of Karnataka. Over the years, it evolved to reach and hold a unique position of pride in the technical education system of India. Over the time it gained tremendous credibility with the industries and employers and emerged as a brand to reckon with, BVB College of Engineering and Technology understook strategic initiative of transforming itself into a Universito of national distinction. In 2015 the college was recognized as a state private University by Government of Karnataka. KLE Technological University offers 8 Undergraduate programs, 9 Postgraduate programs and Ph.D. programs.

About School of Mechanical Engineering

The Under-graduate Program in Mechanical Engineering offered by the School has a meticulously designed curriculum with wide range of courses covering the major ambit of Design, Manufacturing and Thermal streams that are essential to present-day Mechanical Engineering Profession. The student interests and industry expectations are duly adhered to in the design and delivery of the curriculum prepared for the Program. The School augments to additional knowledge base of student community through its uniquely designed 'Minor Programs' – Innovation and Product Development, Automotive Engineering, BioEngineering, and Advanced Manufacturing for Aero-space Applications. The School has identified niche areas in engineering services with employment potential for Mechanical Engineering graduates possessing skills in Product Lifecycle Management.

About M.Tech Production Management Post-graduate Program

In M.Tech Production Management Post-graduate program We have put constant efforts to improve quality and scope of this program to meet student and employer demands of industry-relevant skills. The School on consultation with Industry and academia has found that new recruits with ability to apply theoretical knowledge to real industrial problems fare better in career, The revised curriculum has courses interwoven around two niche areas: Product Life Cycle Management (PLM) and Enterprise Resource Planning (ERP). All courses have immersive learning experience component for students to get 'industry-like exposure'. The lead organizations: Dassault Systemes Foundation, 3DPLM, EDS Technologies, Intelizign, VedhaSoft Technology Development partner to SAP India and others were actively associated in curriculum design, faculty training, delivery and assessment process.

About Symposium

The goals of Product Life cycle Management (PLM) are to reduce time to market, improve product quality, reduce prototyping costs, identify potential sales opportunities and revenue contributions, and reduce environmental impacts at end-of-life. PLM solutions help organizations overcome the increased complexity and engineering challenges of developing new products for the global competitive markets. In this regards KLE Technological University in association with Dassualt Systemes Pune has planned a one day symposium on "Product Lifecycle Management: Collaborative Initiative in Academic Programs" on 9th March 2019, keeping in mind the importance of PLM in today's industrial scenario. The symposium is designed with series of guest lectures on PLM aspects including case studies and real time industrial implementation scenarios, delivered by leading industrial professionals. Final and Pre final year Mechanical Engineering Students and Staff members are invited to attend the symposium.

Note: There is no registration fees for participants





"Pr	Symposium on "Product Life Cycle Management (PLM): <i>Collaborative Initiatives in Academic Programs"</i> March 9 th 2019 Venue: BT Auditorium KLE Technological University, Hubballi-31 Program Schedule				
Sl.No	Time	Sessions			
	9.00 am to 10.00 am	Registration			
1	10.00 am to 10.45 am	Inaugural ceremony			
2	10.45 am to 11.30 am	Session 1: Introduction to Product Life Cycle Management (PLM) (Mr. Ashish, Senior Manager, Dassault Systemes, Pune)			
	11.30 am to 11.45 am	Tea Break			
3	11.45 am to 12.30 pm	Session 2: Moving to Cloud : A futuristic Move (Mr.Manjunath V.G, Senior Manager, Technical Customer Support Dassault Systemes, Pune)			
4 12.30 pm to 1.15 pm Session Approx (Mr. Su		Session 3: Industry process and solution experiences - PLM Approach (Mr. Sunii Kulkarni, Senior Project Manager –Industry Solutions, Dassault Systemes, Pune)			
	1.15 pm to 2.15 pm	Lunch Break			
5	2.15 pm to 3.00 pm	Session 4: PLM – An industrial Scenario (Mr. Prafulla, PLM Solution Architect, Group Technical Specialist, HCL, Pune)			
6	3.00 pm to 3.45 pm	Session 5: Product Life Cycle Management (PLM): Some Initiatives in Academic Programs at KLE Technological University (Mr. Vinayak N Kulkarni, School of Mechanical Engineering, KLE Technological University, Hubballi)			
7	3.45 pm to 4.00 pm	Q &A Round with the industrial resource persons			
8	4.00 pm to 4.15 pm	Valedictory			
	4.15 pm to 4.30 pm	Tea Break			
9	4.30 pm to 5.00 pm	University/School Facility visit			





	Schedule for Industry Institute Interaction KLE Technological University, Hubballi				
SI.No	Time	Sessions			
1	9.15 am to 9.45 am	Networking Tea			
2	10.00 am to 10.45 am	Inaugural ceremony of PLM symposium (BT Auditorium)			
3	10.45 am to 11.30 am	Campus Visit (University/School Facility visit)			
4	11.30 am to 12.30 pm	Presentation – KLE Technological University			
5	12.30 pm to 1.30 pm	Industry Institute Interaction			
	1.30 pm to 2.30 pm	Lunch Break			
6	2.30 pm to 3.45 pm	Industry Institute Interaction – Continued			
7	4.00 pm to 4.15 pm	Valedictory of PLM Symposium			

Minutes of the Meeting held between

KLE Technological University and Industry Representatives

Venue: Senate Hall, Main Building Date: 9th March 2019 Time: 12.00noon - 2.30pm

Meeting attended to KLE Technological University		Industry Representatives		
Dr. Ashok Shettar	Vice Chancellor	Koodli Subramanya	Director, Strategic Projects, Dassault Systems(DS), Bangalore	
P G Tewari	Dean, Academic Affairs	Ashish Kulkarni	Senior Manager, DS- Pune	
Uma Mudengudi,	Dean, R&D	Manjunath VG	Senior Manager, Technical Customer Support, DS-Pune	
B B Kotturshettar	Head, Mech. Engg.	Sunil Kulkarni	Senior Project Manager, Industrial Solutions , DS-Pune	
Nalini lyer	Head, E&C Engg.	Milind Desai	Certification Program Manager, DS-Pune	
Меепа М	Head, CSc & Engg.	Umesh Nayaka	Engineering Manager - CAE Design, General Motors Technical Centre India Pvt Ltd, Bangalore	
A B Raju	Head, E&E Engg.	Prafulla Kulkarni	PLM Solution Architect, Group Technical Specialist, HGL- Pune	
A C Giriyapur	Head, Automation & Robotics	Prashant Kulkarni	CEO, 4SPL Technologies India Pvt.ltd., Bangalore	
Sachin Karadgi	Asso. Professor, Automation & Robotics	Mahantesh S Pattanshetti	Manager, Tech Support, DesignTech Systems Ltd, Bangalore.	
Saroja Siddmal	Asso. Professor, E&C Engg.	Srikumar Maganti	DGM-Tech Support, EDS Technologies, Bangalore	
C D Kerure,	Placement Officer	Gururaj Kulkarni	Senior Manager, Hospet Steels	
		Santosh Patil	Senior Manager, Hospet Steels	
		K. Ajeet Kumar	Manager HR, WEIR Flow Control, Hubli	
		Nitin Kanwade	Dy. Gen. Manager, Planning, TATA Motors, Dharwad	
		Surendranath	TATA Technologies (Telecon)	

Minutes:

Following points were discussed:

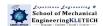
 The Hon. Vice Chancellor shared with the industry representatives the University initiatives in teaching-learning, research and entrepreneurship. He also emphasized the need for instituteindustry collaborations to bridge the gaps in curriculum and thereby developing necessary competencies among students whose employability prospects could be enhanced considerably.

- Mr. Ashish Kulkarni expressed his team's willingness during the discussion on developing Emobility vertical for the institute and assured assistance in developing the curriculum and hands-on activities.
- 3. Mr. Koodli Subramanya discussed the industry trends in the area of testing i.e. the challenges of trade-off between complying to stringent safety regulations and at the same time being cost sensitive to stay in the competitive market. He suggested that major cost on testing can be considerably decreased by shifting focus away from physical prototyping and looking for validation processes using simulation. He indicated that industry-like validation processes for proven performance could be emphasized in the course on CAE. Additive manufacturing could be another vertical where there is a possibility to develop comprehensive courses, he added.
- 4. In the meantime, Mr. Surendranath from Tata Technologies participated in the discussion via conference call. He appreciated the institute efforts to offer specialized courses that are experiential and contextual. He stressed upon bringing more design focus into courses and projects.
- 5. A representative from General Motors, Mr. Uday Nayaka felt that industry is in a state of confusion as to which technology they should adopt for new vehicles i.e. Electric, Autonomous, Petrol or Diesel? Also, industry is striving for zero test concept by developing reliable virtual validation processes applying material informatics and FEA tools instead of validation through physical testing. He opined the need for students to be aware of 6Sigma, DFSS and Design thinking concepts which are extensively followed in industries.
- 6. Tata Motors' representative Mr. Nitin Kanwade expressed that the current trend was towards modularity of vehicles and mass customization; Industry 4.0 would play a major role in days to come and hence the institute should make provisions in the curriculum to create awareness among students on the same.
- 7. Mr. Srikumar of the EDS Technologies shared his views on the PLM course offered by the Institute and mentioned that it was probably the first institute in the state to have offered with so much of emphasis on customization. He explained that there was a huge job potential for the graduates with PLM-Technical competence and they could find jobs for roles like i.e. PLM Admin. PLM Techno-functional (module based) and PLM Technical Support (Functional Expert). Many big players in the automotive sector could absorb the graduates with PLM expertize as they were using the PLM products extensively.
- Mr. Gururaj Kulkarni, Hospet Steels shared his experiences with the trainee engineers and emphasized that any new initiative should not compromise with the fundamental/core courses.
- It was also discussed that one could explore possibilities of engaging with the domains of healthcare, agriculture, energy, infrastructure, etc for PLM implementation. Further, some study could be taken up on profiling these industries to understand their requirements and concerns.

- 10. Some discussions were also held as to how could we teach Industry 4.0 in the context of a course for example Body Structure Engg. the various stages such as Fundamentals, Final Assembly, Body in white and Power train using manufacturing simulation tools.
- 11. Mr. Milind Desai explained the certification program offered by Dassault Systems to validate the learning of students on various modules of 3D Experience CATIA. The certificate would provide an edge to students in getting placement. Since the Institute was already having majority of the tools, teaching support and commitment, the Dassault Systems would recognize it as 'Academic Certification Centre' following the completion of a formal procedure. Further, he also informed that 100 vouchers free of cost (each costing worth Rs. 1500/-) would be provided to the institute to undergo a pilot certification experience.
- 12. The Institute would be in regular touch with all the representatives to realize the actionable points discussed.

The meeting concluded with the vote of thanks.

The Industry representatives visited the various facilities (from 11.00am to 12.00noon) of the KLE Technological University before the meeting.





Industry-Institute Interactions

#	Date	Company	Represented by	Key discussion points
1	15-06-2018	3D PLM/ DS Pune	Hemant Gadgil, Senior Director, La foundation and DS, Pune Ashish Kulkarni- Senior Manager	Syllabus review of the Undergraduate PLM and CATIA courses. Session for professors on Peer Learning Experience Program. Discussion on Various Academia Collaboration Programs Dassault Systèmes India R&D centre is executing to help colleges / Universities, Professors and Students to be "Future Ready" Provided information on Aakruti — National level product design competition for students and Project of the year — Global competition.





2	19-07-2018	Dassault Systèmes, Pune	Interactions at Dassault Systemes Office, Pune with Hemant Gadgil, Senior Director, La foundation , DS, Pune and Ashish Kulkarni- Senior Manager	Developing industry requirement based syllabus/ curriculum discussions on new verticals in the department Building intustry institute interaction model between DS and KLE Tech.





27-11-2018

Dassault Systèmes, Pune

Ashish Kulkarni- Senior Manager
Sunil Kulkarni - Senior Project Manager – Industry Solutions

• Mr. Ashish interacted with faculties and students on 3D experience platform, Importance of PLM in today's industries and Scope for PLM.

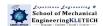
• Mr. Sunil interacted with real time case studies for the beginners in PLM and CATIA courses.

• Both Ashish and Sunil interacted with HOD and faculties regarding development of PLM vertical in the department.





4	16-12-2018	Dassault Systèmes, Pune	Interactions at Dassault Systemes Office, Pune with Mr. Nikhil Sapre - Senior Manager, Training Department.	Mr. Nikhil interacted with faculties of KLE Technological University regarding development of case studies in ENOVIA platform and also discussed on how to make PLM teaching interesting and interacting with students. Mr. Nikhil also demonstrated few real time case studies during the interaction sessions. Vinayak Kulkarni, Arun Patil, Shivaprasad Mukhandmath, Rakesh Tapaskar and Vinay Tigadi were the faculties from KLE Technological University present during the interaction sessions.





5	05-02-2019	Dassault Systèmes, Pune	Ashish Kulkarni- Senior Manager	Interacted and trained faculty members and students on project management fundamentals and its application in ENOVIA PLIM software. Mr. Ashish also interacted with HOD regarding the plan for configuration and customization requirements for PLIM course.
6	09-03-2019	PLM Symposium	Manjunath VG, Senior Manager, Technical Customer Support, DS-Pune Ashish Kulkarni-Senior Manager, DS-Pune Umesh Nayaka, Engineering Manager - CAE Design, General Motors Technical centre India Pvt Ltd, Bangalore Sunil Kulkarni - Senior Project Manager - Industry Solutions, DS-Pune Milind Desai, Certification	N





Program Manager, DS-Pune Prafulla Kulkarni, PLM Solution Architect, Group Technical Specialist, HCL-

Prashant Kulkarni, CEO , 4SPL Technologies India Pvt.ltd., Bangalore

Mahantesh S Pattanshetti, Manager, Tech Support, DesignTech Systems Ltd, Bangalore.

Srikumar Maganti, EDS Technology, Bangalore

Gururaj Kulkarni, Senior Manager, Hospet Steels, Hospet

Santosh Patil, Senior Manager, Hospet Steels, Hospet

K.Ajeet Kumar, Manager HR, WEIR Flow Control, Hubli

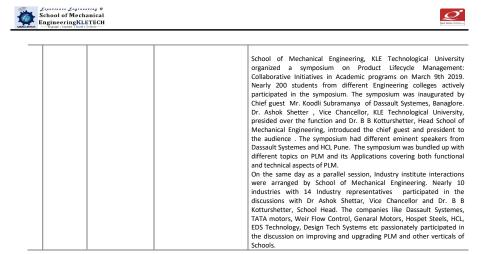
Nitin, Senior Technical Manager, TATA Motors, Dharwad





Following are the major topics on which the industry people interacted with VC, HOD and faculty members of KLE Technological University.

- Introduction to Product Life Cycle Management (PLM) Ashish Kulkarni
- Moving to Cloud : A futuristic Move Manjunath V.G
- Industry process and solution experiences PLM Approach -Sunil Kulkarni
- PLM An industrial Scenario Prafulla Kulkarni







7	08-04-2019	Dassault Systèmes	Huzefa Salim- Global Edu Director, Academic Program, Ashish Kulkarni- Senior Manager Milind Dasai- Certification Manager	Certification programs on CAD modelling Engagement with MotorSports Club by sharing technical expertise and software licenses Design of the curriculum and offering training to the select faculty members of the School on Digital Twin Internships for select faculty members so as to acquaint them with industry practices, processes and technology trends Reviewing the existing curriculum of CAD Modelling and PLM and exploring the possibilities of introducing 'Systems Engineering' as a new vertical
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8	27-05-2019	Dassault Systèmes	Pavan Kalyan Chakravarthi, PLM Consultant, DS Pune	Mr. Pavan interacted with students and faculties on variant management essentials and platform management in ENOVIA PLM application. He also presented some real time industry cases to students.
9	10-08-2019	Ashok Leyland Continental Dassault Systemes	Nandkumar Khandare, K P Phanindra, K Subramanya, Gurudatta Desai	Design of the curriculum and offering internship for Mechanical students. Building cases on automotive discipline. Introducing new industry specific courses. Focus on industry needs and requirements during curriculum design.



