



BITS NEWS E-BULLETIN



UNDER CSI

DEPARTMENT OF INFORMATION TECHNOLOGY



IT is the area of managing technology and spans a wide variety of areas that include computer software, information systems, computer hardware, programming languages but are not limited to things such as processes, and data constructs.

IT professionals perform a variety of functions (IT Disciplines/Competencies) that ranges from installing applications to designing complex computer networks and information databases. A few of the duties that IT professionals perform may include data management, networking, engineering computer hardware, database and software design, as well as management and administration of entire systems.

Teacher In-charge
Prof. N.S.Raote

Head of Department
Dr.U.N.Shrawankar

EDITOR (Students)

Ayush Jha
(III Sem)

Nihar Choudhary
(V Sem)

Prajakta Bhandarwar
(V Sem)

Sagar Pandey
(VII Sem)

DEPARTMENT VISION AND MISSION

VISION

To achieve excellent standard of quality education by keeping pace with rapidly changing technologies and to create technical manpower of global standards with capabilities of accepting new challenges in Information Technology.

MISSION

- To equip our graduates with knowledge and expertise to contribute significantly to the knowledge and information industry .
- Promoting collaborative research through special interest groups, research laboratories and Industry Institute Interactions.
- To nurture interpersonal and entrepreneurial skills to provide leadership in the information industries.

PROGRAMME EDUCATIONAL OBJECTIVES

The educational objectives of the Information Technology programme are designed to produce competent engineers who are ready to contribute effectively to the advancement of information technology causes and to accommodate the needs of the profession. The graduates shall:

1. Practice Information Technology in the general disciplines of design, development & deployment of software and integration of existing technologies for e-governance nationwide.
2. Apply fundamental technical knowledge and skills to provide workable solutions to problems in various areas of IT.
3. Pursue higher education, research and development and deploy creative efforts in the area of Information Technology.
4. Use the acquired knowledge in societal and environmental sensitive manner with professional ethics in a team.

PROGRAM SPECIFIC OUTCOME

Graduates shall

PSO1 -Utilize the hands on experience of industry internship leading to take up live problems in IT industries .

PSO2 - Apply core concepts of information technology in android/iOS Application & Product Development.

PSO3 – Demonstrate the skills in Web based technologies and information management.

PROGRAMME OUTCOMES

Engineering Graduates will be able to:

- 1. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4. Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- 6. The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- 7. Environment and sustainability:** Understand the impact of the professional engineering

solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Logo Designing Competition under Technical & Cultural Events 2018-19

Logo Designing Competition was conducted on 23rd June 2018 under Technical and Cultural Events 2018-19. Total 53 students have participated in the event from different disciplines. Prof. A. S. Nagdive (IT), Prof. G. S. Khekare (IT) & Prof. A. Naik were the judges for the event. Students have designed beautiful interacting logos using different platforms using theme Digital India. Judges appreciated the work of students. Winner for the Event was Mr. Subrat Biswas (5th IT). Runner up for the event was Mr. Abhishek Hirwani (CSE-V sem) & Mr. Sanchit Wakekar (CSE-VII sem). Event was coordinated by Mr. Kapil K. Wankhade (IT).

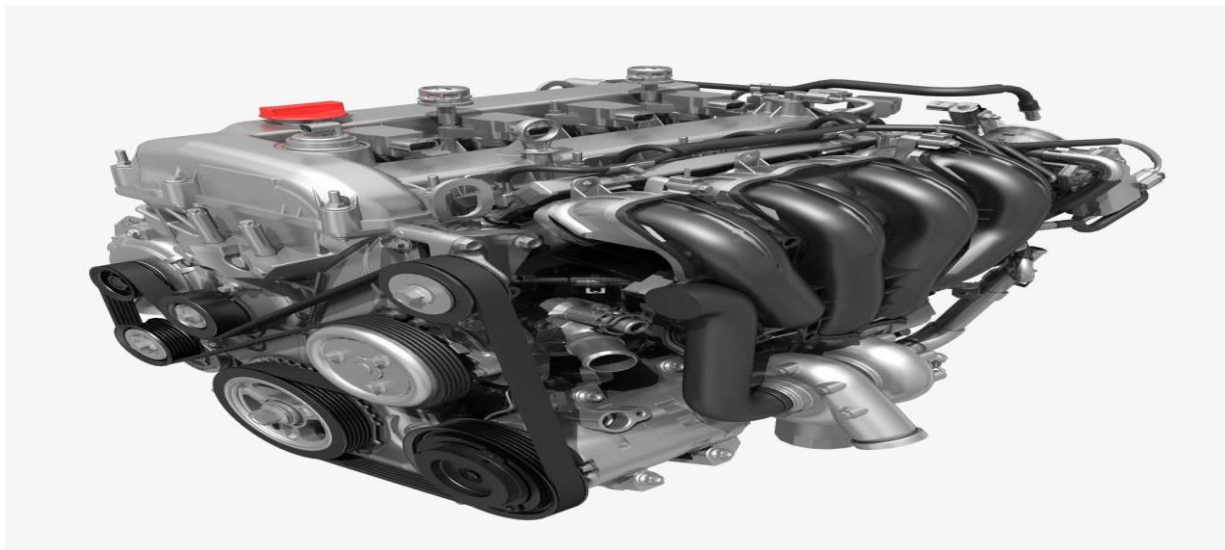


Technical Article

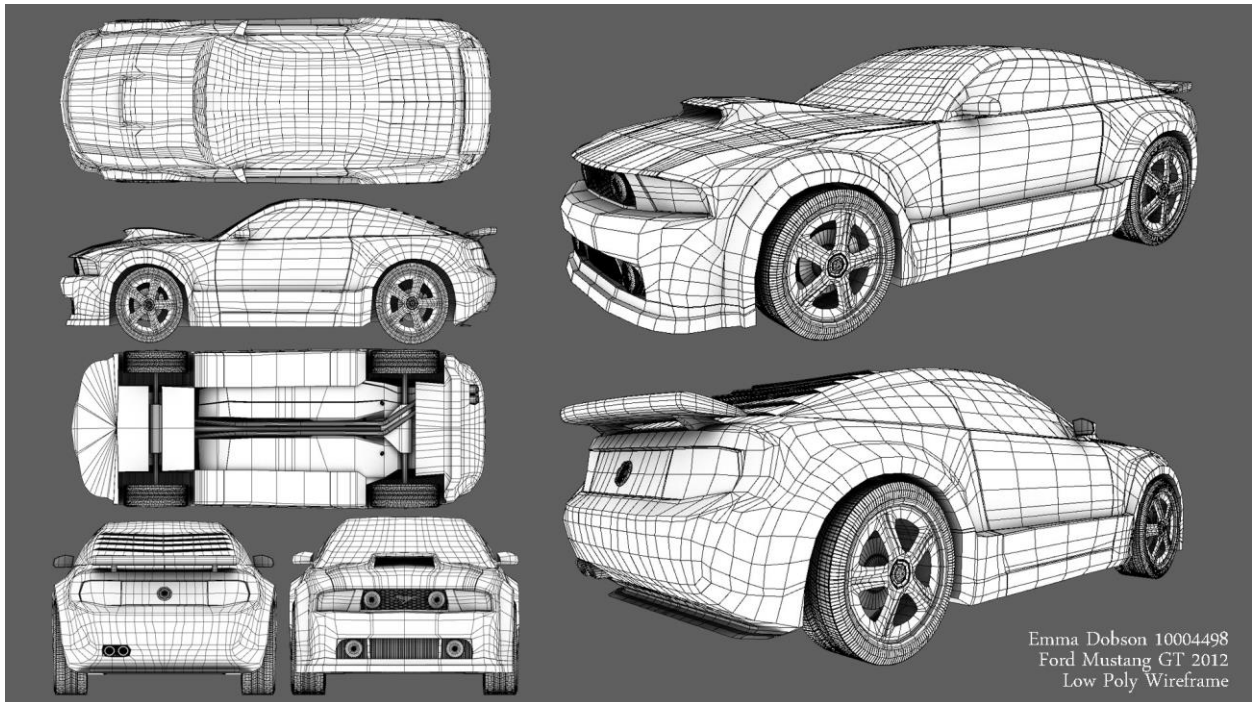
Importance of 3D Animation in Engineering

3D Animation, sounds more like a 3D animated VFX full featured film, right? But do you know, that 3D Animation is very significant in the world of Engineering. Mainly Mechanical and Civil Engineers should consider it as a boon!

Basically, 3D Animation, maybe more precisely we should call it as 3D Modeling. 3D Models are like virtual objects or machines which are made in virtual space in a computer. These models help us to visualize those objects and understand them more easily. Then may it be any mechanical complicated rocket science or something, it can be understood more easily. This can prove very important in the learning process for a student.



Lets consider, we have a prototype model of an idea in our mind. Executing that idea or making that project in real world can be very expensive. It also comes with the risk of losing every single penny we have invested on that project! Sounds bad right? So here comes the role of 3D Models for saving our time and money. We can construct anything in the provided 3D space in a computer and then use that model to pitch our idea or prototype to some investor. This will surely help to execute that project in real world and save time.



What more? There are thousands of more uses of 3D Animation.

In Mechanical Engineering, learning curve is very steep. There needs to be a clear understanding of the working of any machine. Suppose, it's a car. Then each and every part of the car engine, the pistons, the shafts, everything needs to be visualized in mind to clearly understand the working.



There are plenty of softwares available for 3D Modeling. The best software recommended and an industry standard is Autodesk Maya. It also provides 3 years free license for students aspiring to go into this field.

For more information, on learning 3d modeling, refer to this link:
<https://www.youtube.com/mayahowtos>

- Nihar Choudhary
(V Sem)