DEPARTMENT OF MECHANICAL ENGINEERING

DASSAULT SYSTEMES

APSSDC-DASSAULT SYSTEMES

3D EXPERIENCE LAB

Andhra Pradesh State Skill Development Corporation (APSSDC) in association with M/s. Dassault Systems, France, has established a 3D Experience lab in the premises of Sree Vidyanikethan Engineering College in the academic year 2018 with a capacity of 36 systems of computers (HP Laptop with i7 processor, 1TB hard disk and 16GB RAM). The 3D experience lab facilitates licensed software from Dassault Systems, France, to train the students and faculty members of Mechanical, Civil and Electrical Engineering Departments, which operates from a server of 64GB RAM, arranged in the lab. The licenses are connected through the internet server only.

Objectives:

To enhance the employability skill of engineering graduates in research & development technology implementation by imparting skills in engineering design in 3D experience platform throughout the four year academic program.

- Students to implement innovative thoughts on 3D experience platform for product development.
- Improve students' confidence levels by working in domains such as Aerospace, Automotive and Offshore engineering.
- Improved opportunities & placement, sustainability upon recruitment.

Target group:

II, III and IV year Mechanical, Electrical and Civil Engineering faculty members and students, both UG and PG levels.

Levels of training:

Level A

The level A course focuses on II, III and IV year Mechanical, Electrical and Civil Engineering faculty members and students and covers the software applications, introduction of Mechanical design, digital manufacturing equipment system and Finite Element Analysis, with a course duration of 150 hours in which 70 hours are for class room training and the remaining 80 hours are intended for hands-on-practice. The level A has three modules as follows.

CATIA:

CATIA is the World's Leading Solution for Product Design and Experience. It is used by leading organizations in multiple industries to develop the products we see and use in our everyday lives. CATIA stands for Computer Aided Three-dimensional Interactive Application. It is a platform to sketch, Part design, Generative Shape Design, drafting and assembling of the components. The platform has a wide variety of workbenches. The designed models can be exported to other software like Solid works, Creo, Unigraphics and .STL for 3D printing. The CATIA platform requires 60 hours.

DELMIA:

DELMIA, powered by the 3D EXPERIENCE platform, helps industries and service providers connect the virtual and real worlds of value networks to collaborate, model, optimize and perform.

Operational excellence requires harmony across the value network. DELMIA provides solutions to leverage the virtual world of modelling and simulation with the real world of operations to provide a complete solution to value network stakeholders: From suppliers, to manufacturers, to logistics and transportation providers, to service operators and workforces.

DELMIA stands for Digital Enterprise Lean Manufacturing Interactive Application. The industrial engineering problems can be solved on DELMIA like Process planning, scheduling, routing, time study and flow study. It covers digital manufacturing processes and needs 30 hours of learning.

SIMULIA:

SIMULIA applications accelerate the process of evaluating the performance, reliability and safety of materials and products before committing to physical prototypes. Simulation and analysis of the engineering problems are dealt in SIMULIA. Both Mechanical (structural, fluidics, frequency etc.) and thermal (heat transfer, computation fluid dynamics etc.) problems are taught in this domain. It requires 60 hours of learning.

Level B

The level B focuses on the diploma and III year engineering students, those who have completed level A. It covers the basic domain specific training related to three industry verticals such as Automotive, Aerospace and Ship building (Marine and Off-shore).

Level C

It focuses on Final year engineering students who have completed level A & B. It covers the advanced industry domain specific training. The course will spread across three months and will include an application project.

Level D

The capstone project of the eighth semester can be performed by the students under the guidance of one local and one industry mentor. The duration of the project depends on the team size, capacity and complexity of the other projects.

STUDENT REGISTRATION FORM

Name of the student   :

Roll Number   :

Branch   :

Aadhar Number   :

Email ID   :

Contact Number   :

Academic CGPA   :

Name of Father/Mother   :

Parent's contact number   :

Address   :

Office Use

Admission No.   :   _____

Batch No   :   _____

Course Joining Date :   _____

Course Module   :   _____

Signature of the Student