

K.E. Society's

# Rajarambapu Institute of Technology

SIEMENS  
**PLM**

Center of excellence



Your gateway to engineering careers



Rajarambapu  
Institute of  
Technology  
(RIT)



Global  
Talent Track  
(GTT)



Siemens

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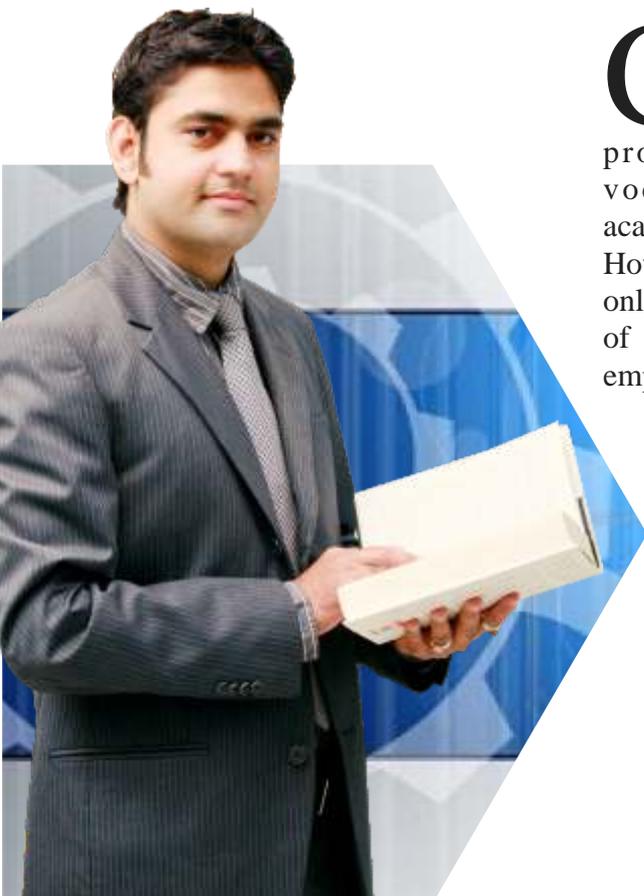
While these resources may have good education, most lack industry specific skills. In order to bridge this gap between the academia and the industry and to ensure ready deployment in regular work streams, structured industry specific training is necessary.

A number of organizations from the private sector have embarked on bridging the skills gap. Siemens has emerged as a leading inventor, innovator and implementer of leading-edge technology enabled solutions operating in the core business segments of Industry.

GTT in association with Siemens wishes to leverage the opportunity for extending the unique skills building framework to the Universities & colleges affiliated to the DTE through this engagement.

# Introduction

Close to 2.5 Million students graduate from various professional, technical, vocational and general academic streams every year. However, the reality is that only a very small percentage of these students are readily employable.



# About

## Rajarambapu Institute of Technology

# RIT

**RIT has a Lush green campus spread over 42 Acres. It offers both UG & PG programmes.**

**Following are some of the key information about RIT:**

## VISSION

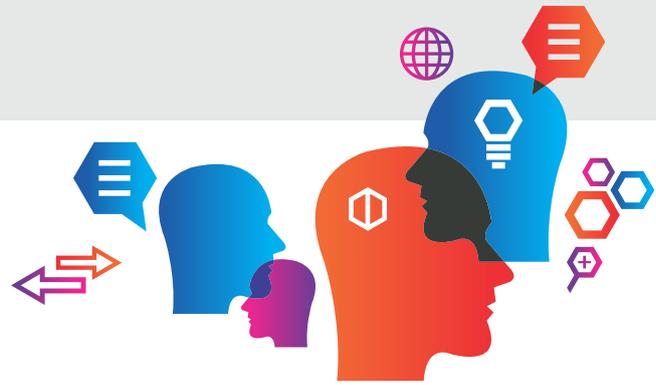
Transformation of young minds into competent engineers to face global challenges.

## MISSION

To offer the state of art technical education programmes to shape promising engineers with requisite skills, knowledge, research aptitude, values and ethics ensuring rewarding careers.

## GOALS

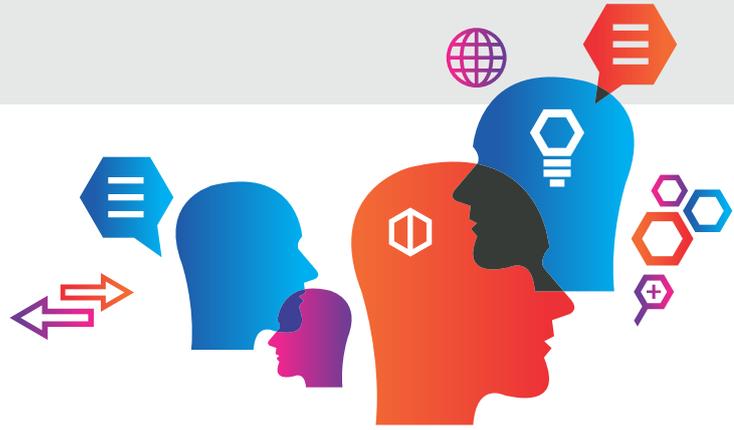
- ★ To attain the status of academic autonomy and deemed University within next five years.
- ★ To develop Center of Excellence in each department in specified areas leading to research, consultancy and Ph.D. programmes.
- ★ To strengthen Industry-Academic interaction to bridge the gap between theory & practice.
- ★ Strategic alliance with reputed Institutes and Universities in India and overseas.
- ★ To promote community development through technology awareness & transfer.
- ★ To develop high quality graduates for Research, employment & entrepreneurship.
- ★ To be amongst first ten most preferred institutes in Maharashtra.
- ★ To attract, retain & develop competent faculty as per cadre ratio.



Rajarambapu Institute of Technology, Rajaramnagar (formerly known as College of Engineering, Sakharale) took birth in August 1983. Located near Islampur, 7 kms from Pethnaka off Pune-Bangalore highway, RIT emerged as a leading technological institute in Western Maharashtra very soon. Its methodical academic monitoring, innovative staff development programmes like 'Quality Circle' forged it ahead of all other institutes.



# About



## Global Talent Track

**GTT has been set up with a clear strategy to address the education & training markets leading to better employability. Over the last three years, GTT has:**

- ★ Access to over 800 colleges across the country;
- ★ Twenty education centers in the country;
- ★ Experience in training over 25,000 candidates in the last 3 years;
- ★ Experience in working with various state governments and government agencies and corporate clients
- ★ Large pool of trainers both employees and consultants

Additionally, GTT has developed courses in various business and technology domains and employs proven pedagogy & technology assisted training delivery models.



**Siemens brings to India state-of-the-art technology that adds value to customers through a combination of multiple high-end technologies for complete solutions. The Group has the competence and capability to integrate all products, systems and services. It caters to Industry needs across market segments by undertaking complete projects such as Hospitals, Airports and Industrial units.**

## SIEMENS

The Siemens Group in India comprises of 17 companies, providing direct employment to over 18,000 persons. Currently, the group has 21 manufacturing plants, a wide network up of Sales and Service offices across the country as well as over 500 channel partners.

Today, Siemens, with its world-class solutions plays a key role in India's quest for developing modern infrastructure.



# About SIEMENS PLM



## What is PLM?

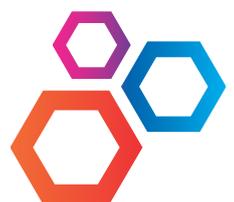
Product lifecycle management (PLM) is an integrated, information-driven approach to all aspects of a product's life -- from its design inception through its manufacture, deployment and maintenance, culminating in its removal from service and final disposal.

The PLM platform is the basis for underpinning the most strategic initiatives a company has toward increasing their overall ability to turn more ideas into successful products. In addition, the platform also supports a comprehensive set of capabilities which support the multiple functions and processes across the phases of the lifecycle. And these capabilities deliver value in each of these areas.

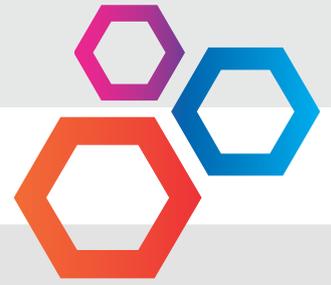
In today's economic environment, companies need to have a laser sharp focus on their financial performance. The really strong players find a way to increase their revenue AND decrease their cost so as to maximize profit and capture market share at the expense of their competitors.



**PLM is now a mission critical system that enables companies to survive and thrive in today's environment.**



# SIEMENS



## Industry Software

### A Global leader in PLM

Siemens offers the broadest suite of applications in the PLM market to provide customers with value across all phases of the product lifecycle. By delivering these applications on top of a single PLM platform, Siemens Industry Software provides companies with an integrated environment which connects users and knowledge from all parts of the lifecycle. Siemens PLM software product portfolio is represented by these four product brands:



- ★ NX for Digital Product Development
- ★ Tecnomatix for Digital Manufacturing
- ★ Teamcenter for Digital Lifecycle Management
- ★ Velocity Series which provides PLM for small and mid-sized businesses

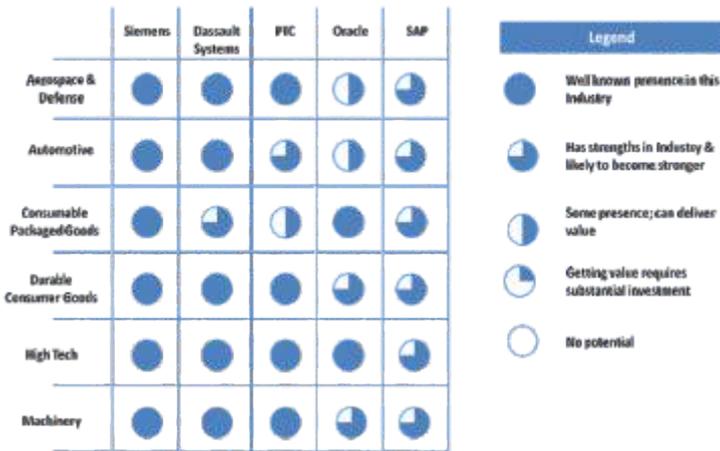
## SIEMENS Clients in India

Siemens PLM Software has strong presence across most major industry segments in today's market. The diversity of our business underscores our understanding of PLM and the close working relationship we have with customers in all industries. It also is a strong testament to the strength that Siemens PLM Software solutions have in delivering value across multiple industries.

AEROSPACE DEFENSE	AUTOTIVE TRANSPORT	MACHINERY & INDUSTRIAL PRODUCTS	HIGH TECH ELECTRONICS

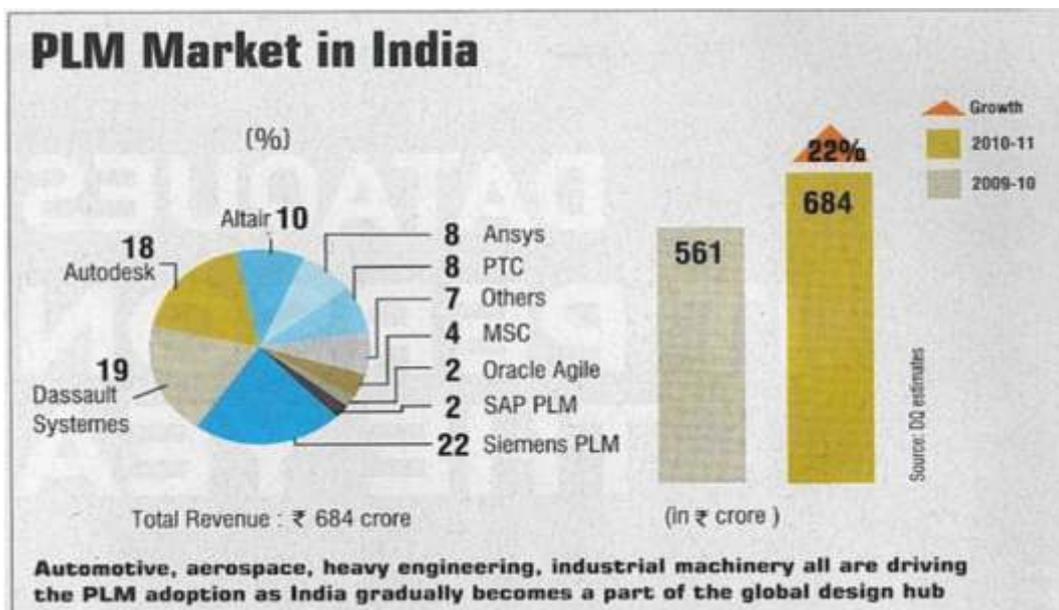
# SIEMENS

Gartner – PLM Vendors with Industry Depth



## The PLM Market

Siemens PLM and Dassault Systèmes are the frontrunners, but for different reasons. These two vendors provide excellent core PDM and extended PLM functionality, but offer two distinct approaches to PLM. Siemens PLM continues to build on its legacy of innovation in the PLM space by constantly raising the bar with the depth and breadth of their product offerings. Dassault Systèmes is bringing new functionality to the table as well, but the flexibility of its ENOVIA MatrixOne product architecture continues to be its best feature. Siemens PLM offers dominant breadth and a leading strategy. Industrial giant Siemens acquired UGS in 2007, forming the Siemens PLM Software business unit under the company's Automation & Drives division.



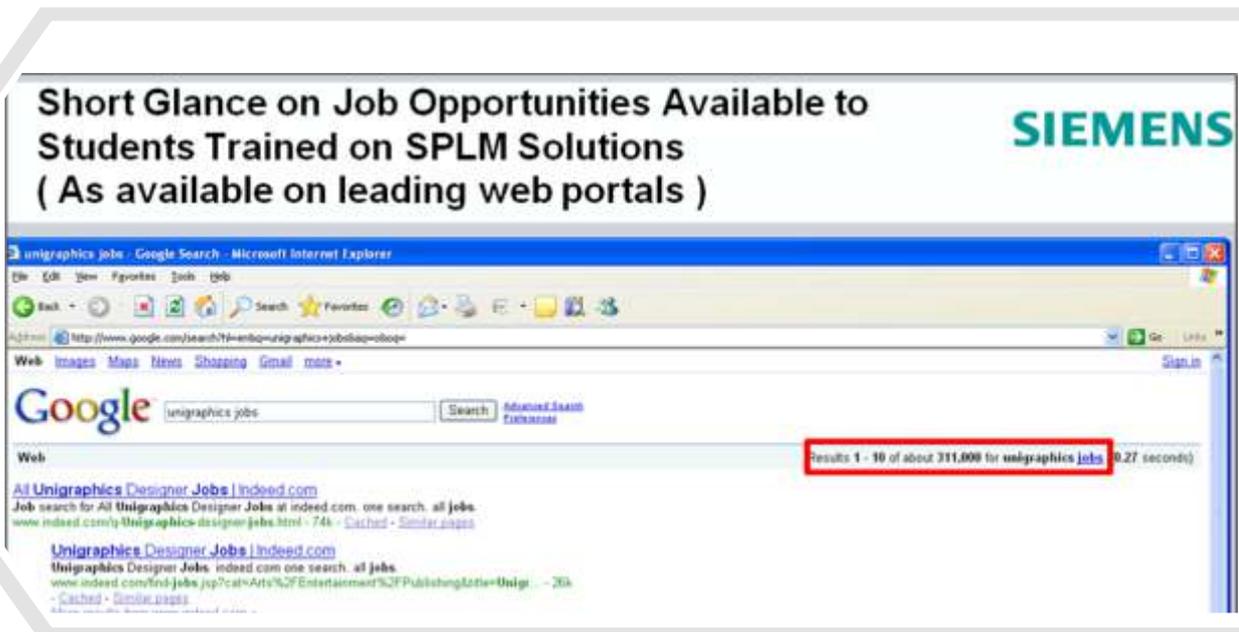
All the customers conveyed Siemens PLM Software's strategy as a key differentiator, specifically citing the company's vision for an open product/process data platform and industry-leading integrations that drives future value.

# Education Initiatives by SIEMENS

Siemens has the sole aim to help the Technical Education Institution to develop world class Institutes for research and education; by providing them with the industrial experience it has acquired over the years delivering the best possible solutions to its customers. By its education initiatives, Siemens intends to help improve the learning quotient and provide teaching aids to help students and faculty. It also intends to provide an interface between the Industry and technical institutes which is a necessary part of technical education.

## Some of the laurels achieved by Siemens in the field of education:

- ★ Anna University and Siemens PLM Software set up Center of Excellence for PLM
- ★ VTU – 110 Colleges deploys Solid Edge
- ★ PACE ( Partners for Collaborative Engineering Education ) centers

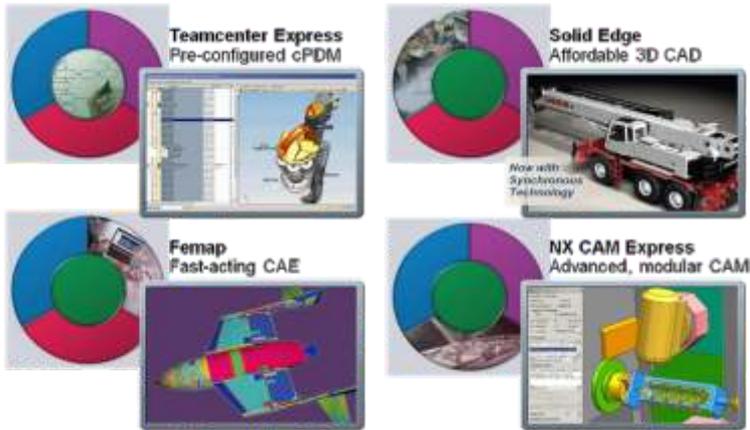


As per market research by Siemens



# Products of SIEMENS Industry Software

**Solid Edge:** Solid Edge is an industry-leading mechanical design system with exceptional tools for creating and managing 3D digital prototypes.



**Femap:** Femap is an advanced engineering simulation software program that creates finite element analysis models of complex engineering products and systems, and displays solution results. Femap can virtually model components, assemblies or systems and determine the behavioral response for a given operating environment.

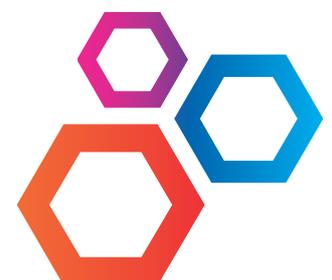
**CAM Express:** Industries need software applications that offer power and capability with a low total cost of ownership. The system is easy to deploy, learn and use, with the industry's best practices pre-configured and built in to standard processes so that less experienced users can become fully productive with less training and experienced users can maximize efficiency.

**NX:** NX is a next-generation digital product development system that helps companies transform the product lifecycle. With the industry's broadest suite of integrated, fully associative CAD/CAM/CAE applications.

**Tecnomatix–Manufacturing:** Tecnomatix Manufacturing Process Management capabilities are built on the Teamcenter foundation and provide viewing and linking between product, process, plant and resource information.

**Tecnomatix–Robotics:** Tecnomatix Robotics & Automation Planning provides the next generation of simulation and commissioning capabilities for complete system level engineering and validation.

**Teamcenter:** Teamcenter gives you a rich environment for the associative development of mechanical, electronic, software and control (electrical-interconnect) technologies, within a single source of product and process knowledge that spans all four domains.



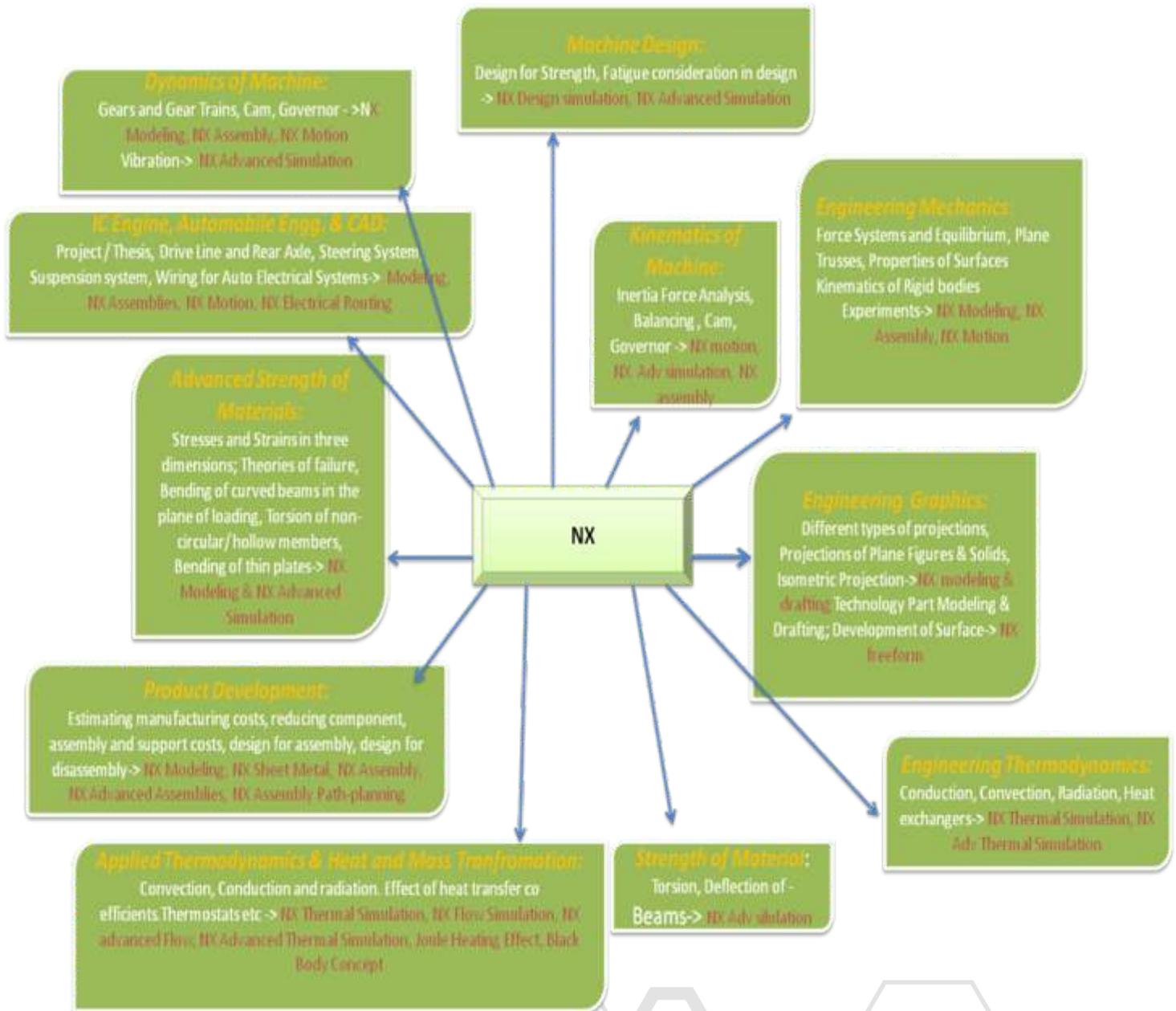
# SIEMENS Courses mapped to Academic Curriculum

Below is a diagrammatic representation of the engineering curriculum mapped with Siemens CAD tools. Siemens engineering design tools are extensively used by the industry. Learning these tools as a part of the curriculum will help the students to be productive from day one and thereby secure a rewarding career.



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# The Center of Excellence (COE) Initiative

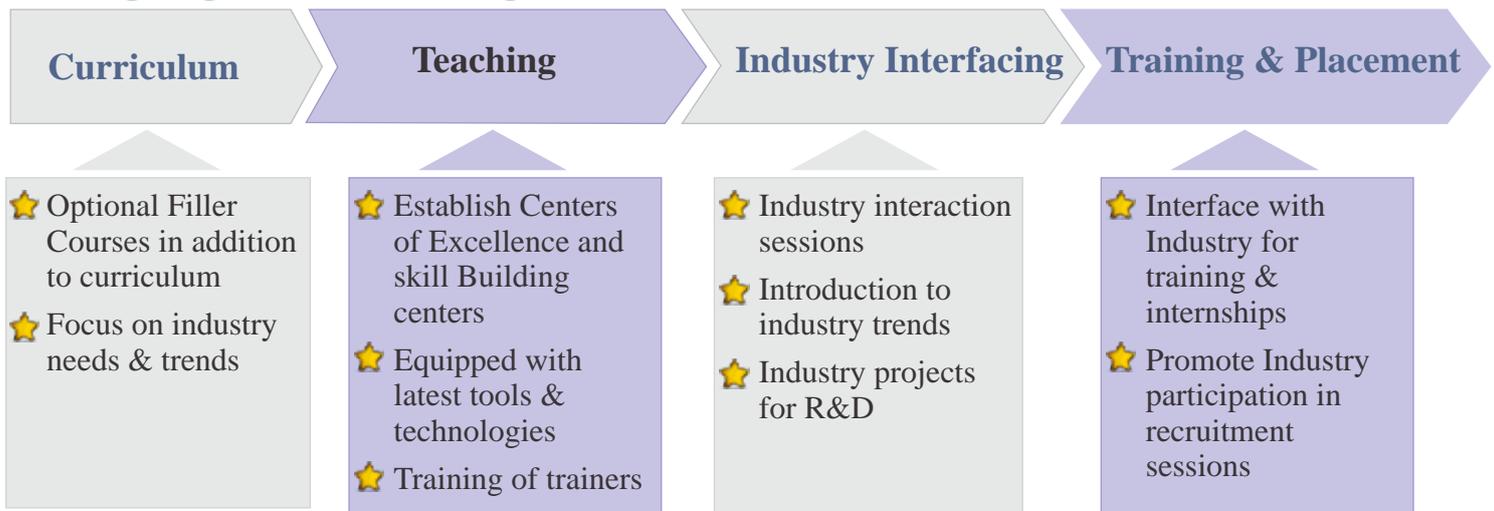
Centre of Excellence is a unique initiative envisaged by Rajarambapu Institute of Technology, Siemens and GTT in order to enhance employability of RIT students and create a qualified pool of talent in the area of engineering design.

The COE will bring benefits of Siemens Academic Partnership Program. The mission of this program is to improve the technical stature of academic institutions and their ability to develop PLM top-notch engineers and technologist for our communities, customers and business partners.

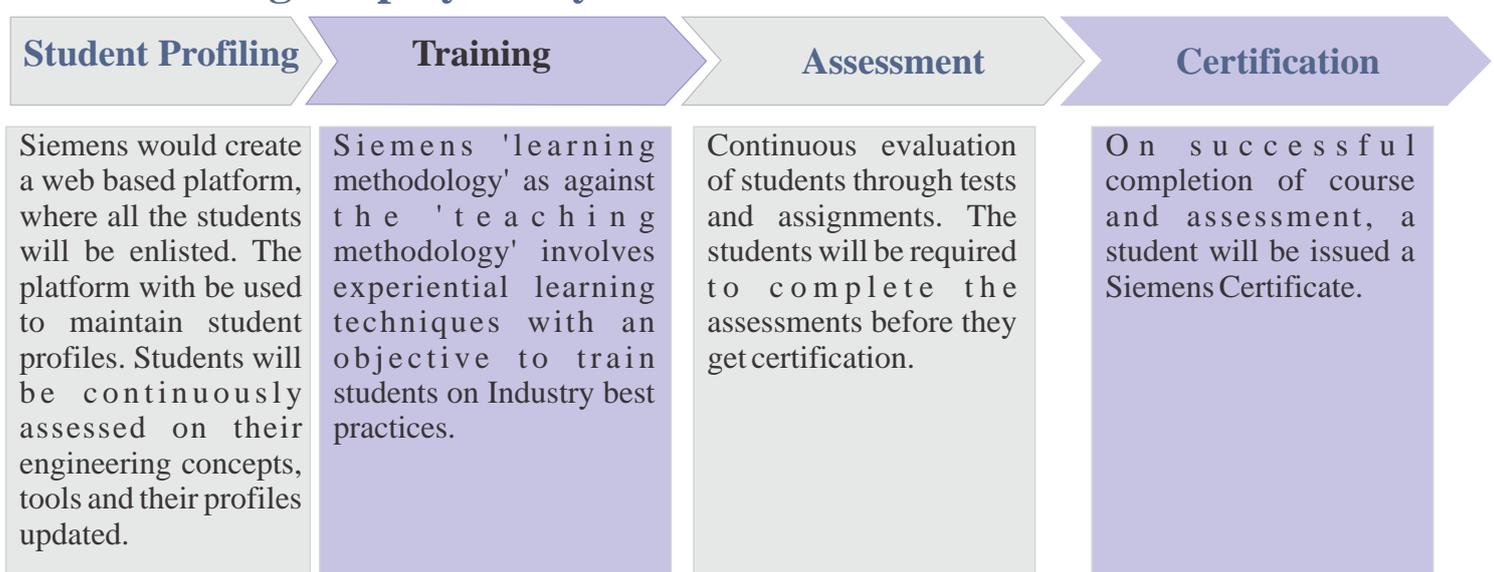
The Siemens PLM Software Academic Partnership Program is the most comprehensive of its kind, serving 1.2 million students yearly at 11,320 global institutions. Siemens PLM Software is unique in the PLM and CAD/CAM/CAE industries offering software to schools that can be used at every academic level – from middle schools to graduate engineering research programs. These tools are ideally suited for your engineering, engineering technology, manufacturing, industrial design and design and drafting programs.

Siemens PLM Software offers all of its partner schools, the same world-class product lifecycle management software and services for digital product design, simulation, analysis, manufacturing and product data management that are used by our commercial customers. We consider every school, no matter how small, a partner. With the Academic Partnership Program, you get the same software upgrades and customer support that our commercial customers receive. Academic partners have access to a broad range of software solutions including, NX, Solid Edge, Tecnomatix, Teamcenter and the PLM Components, as well as an extensive group of products offered by our many software partners.

## Highlights of the Program



## Enhancing Employability of Students



# Faculty Enablement

We believe that the teacher is the pivot around whom the teaching- learning experience for children revolves. The role of teacher training is to help teachers add value to the learning process in terms of what is taught, how students gain access to it and what human achievements result. Training emphasizes pedagogic applications of ICT through a mix of learning strategies. Teachers have been employing rudimentary teaching methodologies for years. They need to be introduced to the latest technology, exposed to the best practices and innovation in Industry. This is a kind of transformation initiative and to be focused on improving quality of teaching in colleges.

## Benefits of the COE Model

**The proposed centre of excellence will be unique in the following ways**

- ★ GTT to conduct skills development training for the candidates in the Siemens Tools such as CAM Express, NX CAD, TCUA and Solid Edge areas
- ★ Establish Collaboration with the industry and Siemens customers worldwide for providing placement assistance to the candidates upon successful completion of the training
- ★ Branding & industry visibility for Rajarambapu Institute of Technology in the education arena through seminars and industry expert sessions.

## Following is the action plan:

### A. Setting up of the COE Centre:

GTT will setup the Siemens COE Centre for imparting training to the Engineering students on PLM curriculum coordinate the PLM Training Program, course material, software support and Siemens certified faculty as per course requirements. GTT will also provide Certificate of Merit from SIEMENS on completion of the required training program to every eligible student.

### B. Training & skill development

Training to be conducted by GTT by engaging with subject matter experts & certified trainers at the Siemens lab located at college premises identified by DTE. Training will be a blend of theory and practical through face to face delivery mode.

### C. Collaboration through Industry Seminars

There will be atleast two seminars by industry experts to provide students and faculty with the industry exposure and insights on the expectations to be scheduled during the course of the program.

The proposed Centre of Excellence (COE) provides an industry recognized platform for focused training that is aligned to the present day business needs. In addition, the COE will help position the university as a leading Institution with focus to align academia with requirements of the dynamic industry and the trends.



# Benefits to the Students of RIT

## Some of the benefits that will be derived by the students:

- ★ Enhancement of the scope employment for the students
- ★ Opportunity to get specialized skills alongside their graduation thereby bridging the gap
- ★ Certificate of Merit from Siemens upon completion of the training
- ★ Globally recognized and industry aligned curriculum
- ★ Siemens “Official Curriculum” for all Siemens PLM Products
- ★ Training Conducted by Siemens PLM “Certified Trainers”
- ★ Certified student details uploaded on the Siemens PLM Database

## Training Model

### Product offering for Training for Polytechnic/UG/PG Students

Tool		Eligibility	Suggested Stream	topics/course covered	Certification of merit	USP of the program	advantages to student
CAM Express	→	Diploma /BE	Mechanical/ Prod/ Auto/Intru	NX - Manufacturing Fundamentals	Yes	Core Manufacturing fundamentals and principals that are applicable across any industry and product	Latest Technology + Siemens Certificate
NX CAD	→	Diploma /BE	Mechanical/ Prod/ Auto/Intru	NX - Essentials forNX Designers	Yes	CAD basic principals applicable across the industry	Latest Technology + Siemens Certificate
TCUA	→	BE	IT/CS/Mech	TCUA - Using TC & TCUA - Integration for NX Users	Yes	Hand on practice on a leading PLM tools across the globe	Latest Technology + Siemens Certificate
Solid Edge	→	Diploma /BE	Mechanical/ Prod/ Auto/Intru	SE - Fundamentals with ST	Yes	Hands on Synchronous Technology which is the future of 3D Designing	Latest Synchronous Technology + Siemens Certificate

## Conclusion

Learning programs for students must engage students motivating them to learn with improved comprehension and retention. To meet this challenge Siemens has designed and developed Computer based Training modules for academic-subjects and Siemens tools-skills. Also, with a focus on experiential learning, Siemens will provide students various short-term learning modules & research projects to apply and hone their knowledge.



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## **Rajarambapu Institute of Technology [RIT]**

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