

INDIAN INSTITUTE OF TECHNOLOGY ROPAR, RUPNAGAR-140001 (PUNJAB)
DEPARTMENT OF MECHANICAL ENGINEERING

Dated: 26-2-2010

SUBJECT: N.I.Q. for purchase of CATIA and SMARTEAM software licenses

Sealed quotations on company letter head are invited for the purchase of the following software at IIT Ropar:

S. No.	Details of the software	Quantity
1	CATIA – Academic Teaching & Training Licenses (DIC)	20 licenses
2	CATIA – Academic & Industrial Research Licenses (ED2)	6 licenses
3	ENOVIA SmarTeam Academic Package	10 licenses

Terms and Conditions:

1. The technical specifications and financial bids (in separate sealed envelopes) should reach the office of Dr. Harpreet Singh (Room No. 208, Mechanical Engineering Department) latest by 3:00 PM on March 17, 2010.
2. Quote should be inclusive of all taxes and duties, in INR only and CIF, Rupnagar (Punjab).
3. Quote should be valid for a period of atleast three months.
4. Latest version of the software should be provided.
5. Installation, Commissioning, and full demonstration should be free of cost.
6. Free software maintenance (including upgrades, updates, and on-site/phone customer support) should be provided for a minimum of 5 years.
7. The policy regarding payment terms, delivery period, warranty, personnel training, software updates, and customer support should be clearly specified in the bid.
8. EMD of Rs. 50,000 in the name of Registrar, IIT Ropar is to be submitted along with the quotation.
9. Payment will be made against delivery and installation of software at IIT Ropar.
10. The institute reserves the right to accept/reject any/all the offers without assigning any reason whatsoever.

(Mr. Lagvish Kumar)

(Dr. Himanshu Tyagi)

(Dr. Harpreet Singh)

(Prof. B.K. Dhindaw)

S.No.	Name & description of Software
01.	<p><u>CATIA - Academic Teaching & Training Licenses (DIC) :</u> (for Virtual Product Design and Development)</p> <p>Mechanical Design (Part Design; Assembly design; Surface & Wireframe Design; Design of Molded Parts; Generative and Interactive 2D Drafting ; Structures Design; Design of Sheet Metal components; Design and manufacturing of composites; Weld Design; Design of Functional Molded Parts ; Design and optimizing of Cast & Forged Parts ; 3D Functional Tolerance & Annotation ; Mold Tooling Design ; Core & Cavity Design)</p> <p>Shape Design & Styling Solutions (Freestyle shape generator, editor and sculptor; Generative Shape design; Intuitive Sketch and Profile maker; Real time 3D rendering; Photo-studio features to represent the product in its most natural environment)</p> <p>Product synthesis Solutions (Digital Mock-up for... (a) Space and volume analysis, and (b) Kinematics Simulations; Knowledge based engineering and template generation and usage to increase productivity; Ergonomics and Human Engineering for better understanding during product designing and engineering)</p> <p>Equipment & Systems design solutions (Plant layout solutions; Complete electrical systems designing and engineering in 3D; Complete piping and tubing solutions in 3D; HVAC systems design and engineering;)</p> <p>Analysis Solutions (Generative Part Structural Analysis; Generative Assembly Structural Analysis ; Generative Dynamic Response Analysis ; Elfini Structural Analysis ; FEM Surface Analysis ; FEM Solid Analysis)</p> <p>Manufacturing Solutions (Machine Tool Builder and Simulation ; NC Manufacturing; Prismatic Machining ; Multi-Axis Surface Machining ; Multi Pocket Machining ; Advanced Machining ; Lathe Machining ; Multi-slide Lathe Machining ; Rapid Prototyping)</p> <p>General Utilities (Interfaces and integration tools)</p>

02.

CATIA - "Academic & Industrial Research Licenses - (ED2)

Mechanical Design Composites Engineering , Composites Design for Manufacturing , 2D Layout for 3D Design ,Assembly Design , Weld Design , Part Design ,Part Design Feature Recognition, Functional Molded Parts ,Cast & Forged Part Optimizer , Wireframe & Surface, Generative Drafting, Interactive Drafting, 3D Functional Tolerancing & Annotation, Structure Design, Mold Tooling Design, Core & Cavity Design, Healing Assistant, Sheetmetal Design, Sheetmetal Production

Shape Design and Styling Solutions Photo Studio,

Realistic Shape Optimizer, Real Time Rendering, Photo Studio Optimizer,Generative Shape Design,Generative Shape Design Optimizer, Developed Shape,Freestyle Shaper, Freestyle Optimizer, Freestyle Profiler, Freestyle Sketch Tracer,Imagine & Shape,Digitized Shape Editor,Quick Surface Reconstruction,Shape Sculptor, Automotive Body in White Templates

Product Synthesis Solutions Knowledge Advisor,Knowledge Expert, Knowledge Engineering Optimizer, Product Knowledge Template Definition,Business Process Knowledge Template,Product Function Description,DMU Navigator,DMU Space Analysis, DMU Fitting Simulator, DMU Kinematics Simulator, DMU Optimizer,DMU Engineering Analysis Review, DMU Fastening Review, DMU Dimensioning & Tolerancing Review, DMU Space Engineering Assistant, DMU Composites Review, Flex Physical Simulation, Human Builder,Human Measurement Editor, Human Posture Analysis, Human Activity Analysis, Human Anthropology Catalogs, Human Preferred Angles Catalogs,Vehicle Occupant Accommodation, Human Posture Catalogs

Equipment and Systems Engineering Solutions

Circuit Board Design, Systems Routing, Systems Space Reservation, Electrical 3D Design & Documentation, Electrical Systems Functional Definition,Electrical Library, Electrical Wire Routing,Electrical Harness Installation,Electrical Harness Flattening, Electrical Connectivity Diagrams, Electrical Cableway Routing,Systems Diagram,Piping & Instrumentation Diagrams, HVAC Diagrams, HVAC Design,Piping Design, Tubing Design,Tubing Diagrams, Waveguide Design, Waveguide Diagrams, Hanger Design,Raceway & Conduit Design,) Equipment Arrangement,Structure Functional Design, Ship Structure Detail Design, Compartment & Access, Plant Layout.

Analysis Generative Part Structural Analysis, Generative Assembly Structural Analysis, Generative Dynamic Response Analysis, Elfini Structural Analysis, FEM Surface, FEM Solid,

Manufacturing Machine Tool Builder, Machine Tool Simulation, NC Manufacturing Review, Prismatic Machining Preparation Assistant,

Prismatic Machining, 3 Axis Surface Machining Multi-Axis Surface Machining, Multi Pocket Machining,Advanced Machining, Lathe Machining,Multi-slide Lathe Machining,NC Manufacturing Verification,Rapid Prototyping,

Infrastructure

1. CATIA – Digital Product Rights Manager 1 (RM1)

Product Data Filtering, Object Manager, CADAM Interface, IGES Interface, Step Core Interface, Strim/Styler to CATIA Interface, V4 Integration,Instant Collaborative Design,ENOVIAvpm Supply Chain Engineering Exchange,PPR xPDM Gateway

03.

ENOVIA SmarTeam Academic Package

Product Lifecycle Data Management Specifications:

Allows students to learn design and engineering collaboration in a Multi-CAD environment. Students can learn how to reduce their time and effort to create flexible and modular solutions.

SmarTeam also aides in automation of the teaching, learning and evaluation process. It will act as a backbone on which all the teaching and learning activities could be performed.

This software will provide:

- Complete data management system (Change Management, Configuration Management capabilities, and Version Control capabilities)
- Easy search and query mechanism including Full Text Search on metadata (attributes) and file data
- Integration with Microsoft Office
- Multi-CAD Integration/support and CAD data Management

Most Unique Feature of this software is **Visualization**. It supports native 2D and 3D CAD, office, and raster file formats visualization. Multiple user redlining options, enhanced printing and manipulation tools are also available. This way the students will be able to learn faster and better.