Rajiv Gandhi Institute of Technology Kottayam

Presentation to ABC

Contents

- Review of College
- Department of Mechanical Engg
- Industrial Engg & Management
- Additional Information

College Information

- Owned by Government of Kerala, celebrating 'Silver Jubilee' in 2015-16.
- Vast campus with 67 acres of land.
- Affiliated to APJ KTU / MG University.
- 6 UG, 7 PG and 2 PhD programmes.
- NBA Accredited UG programmes, TEQIP and QEEE institute.
- Ranked amoung the top five state engineering colleges, Rated 'Outstanding' (2nd best in Kerala) by RECCAANIT, Graded AAA+ by Careers 360.

Courses

Dept	UG (B.Tech)	PG (M.Tech)	Research (PhD)
Electrical	BTech	Industrial Drives & Control	Research Center
Mechanical	BTech	Industrial Engg & Management	
Civil	BTech	Transportation Engg	Research Center
Electronics	BTech	Advanced Communication & Information System; Advanced Electronics and Communication Engg	
Computer Science	BTech	Computer Science & Engg	
Architecture	BArch		

Highlights

- Infrastructure: Independent blocks for department, Latest lab facilities
- B.Tech programmes have been NBA accredited for 3 years (w.e.f Jan 2016)
- Quality Faculty: 22 PhD holders, Ave. 12 years experience
- Centers & Projects: KTU Cluster Lead Institution, CERD, TEQIP (Phase 2), DST
- Professional bodies: IEEE, SAE, IIIE, EEA, IAS
- International Faculty interactions: Abudhabi, Singapore, Canada, China, USA, Italy, Japan, Switzerland, Malaysia

> Outcomes:

- Good number of University ranks each year
- 60-70% placement from eligible candidates, 2 in Civil Services
- More than 100 Publications in Conferences and Journals, 2 Books, 2 Patents
- 9 MoUs, 4 Startups (within campus), 4 Startups in Startup Village

U.G Admission Ranks (State Merit)

	Year of Admission			
Диодиатто	2012	2013	2014	2015
Programme	First-Last	First-Last	First-Last	First-Last
Civil Engineering	2915- 6690	3082-7913	3476-6046	2083-5003
Computer Science	1343-4780	1491-6103	2066-7977	1456-5224
Electrical Engineering	2267-4651	1105-5700	1613-5100	1008-5948
Electronics & Communication	734-5982	882-3887	1162-3723	1192-5774
Mechanical Engineering	478-2593	1104-3395	1139-3359	744-3515

University Rank Details

Branch	2013-14	2012-13	2011-12	
EC	B.Tech II Rank M.Tech I , II & III Rank			
CS				
ME	M.Tech Ist Rank & III Rank	M.Tech I & II Rank	B.Tech First Rank, M.Tech I , II & III Rank	
CE	M.Tech I , II & III Rank		B.Tech First and Second Rank	
EEE	M.Tech I, II & III Rank	M.Tech I , II & III Rank	M.Tech I , II & III Rank	

Campus Placement

Microsoft

- Oracle
- ► IBM

Infosys

- > Wipro
- > TCS
- UST Global
- Larsen and Toubro
- ≻ HCL

Accenture

- ► IBS
- SunTec

MRF

- Shapoorji Pallonji
- South Indian Bank

➢ Idea

≻ ELGI

- Mphasis
- > Lister
- Verizon
- > NeST
- > AQ
- QBurst
- TATA ELXSI

> 180 students placed in 2016

Recruiters

Idea













Shapoorji Pallonji & Co. Ltd



ENVESTNET'

MRF

Empower your practice

Recruiters

ELGI

Think Long Run

Analytics Quotient

HCL

Burst

TATA

TATA ELXSI



ARSEN & TOUBRO



webone



TO ENGINEER

SunTec

Nest



RIT Alumni

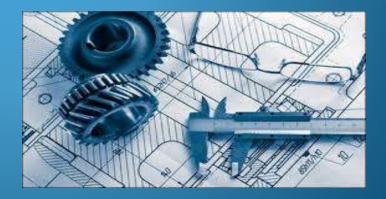
<u>Public Sector</u> IPS (Govt of India) Irrigation Dept (Govt of Kerala) ISRO and VSSC (Trivandrum) Kerala Productivity Council (Kochi) Kerala PWD, KSEB, BPCL, BHEL, HAL

Private Sector

Mircosoft, Oracle, TCS, Infosys L& T, Volvo, MRF, Reliance, Daimler, V-Guard, Entuple, GE, Siemens, Lamprell Energy Ltd Nest, Tata Elxsi, Bosch

Educational Institutions: RIT (Kottayam), METS (Mala), AJCE (Kanjarapally), SCMS (Kochi), SGITS (Kottayam), MEC (Ettumanoor), KITS (Kottayam), CoE (Kidangoor), CoE(Alleppy), SBCS (Kayamkulam) Higher Studies (MTech, PhD) IIT, IISC, NIT, CUSAT, Pondicherry University, Kerala University, Hyderabad University, University of Southern Queensland Australia

Mechanical Engineering



Achievements

(Academics, Placement, Higher Studies, Startups)

- > **NBA accredited** for 3 years w.e.f 1/1/2016.
- Academics: Was one among two teams from Kerala selected for the main event of Efficycle, SAE India.
 - Secured 1st prize in Auto Quiz, SAE India Students Convention.
 - Secured 1st prize in automobile prototyping, Indian Institute of Technology Kanpur.
 - Secured 3rd prize in National Mechanical CAD design context, SAE Tier-3 Competition.
 - Skills: Design using CATIA/ANSYS/SOLIDWORKS/MATLAB, Rapid Prototyping, CNC machining

Good projects: 1 patent, 3 published papers

Achievements (Academics, Placement, Higher Studies, Startups)

- > **Publications:** more than 60 conference and journal publications over past 5 years.
- Core Placements: TATA Materials Bangalore, TCS (EIS), MRF, Al Adrak Oman
- Higher studies: MTech (Design Engineering) IIT Delhi, MS (AeroSpace) University of Buffalo US, MS (Mechanical Engineering) University of Southern Queensland Australia, MTech (Materials) NIT Trichy, MS (Mech Engg) Huston University, MS(AeroSpace) Beijing University
- Startup: Rinine Engineering Pvt. Ltd. started, first of its kind in Kerala, focuses on design and development, runs in Department of Mechanical Engg

Technology Business Incubation Center

Four startups in core engineering fields are presently working from within the campus. Prominent among them, started by Mechanical Engineering students, is Rinine Engineering Pvt. Ltd. currently serving the design, analysis and prototyping requirements of both local and oversea clients.



Lab Facilities

- . Heat Engine Lab
- 2. Heat Transfer Lab
- 3. CAD/CAM Lab
- 4. Fluid Mechanics Lab
- 5. Hydraulics Lab
- 6. Measurement Lab
- 7. Mechanical Engineering Lab
- 8. Refrigeration & Air Conditioning Lab
- 9. Industrial Engineering Lab
- 10. Ergonomics Lab
- 11. Mechanical Workshop



CAD-CAM Center



New CAD/CAM Lab



Machine Shop



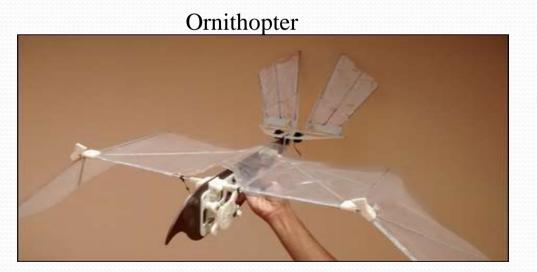
Heat Engines Lab



Mechanical Workshop

Academic Projects

- The Projects undertaken by students included many design, analysis and fabrication works in aeronautical, automobile and marine using high end softwares like CATIA, SolidWorks, ANSYS, Matlab etc.
- > They also undertake CFD analysis.



Anthropomorphic robotic hand



Academic Projects



Unmanned Areal Vehicle



Wing in Ground Effect Craft

Gyrocopter

Efficycle



Industrial Engineering & Management



Course and Outcome

- Started in 2005, Interdisciplinary, GATE qualified students
- Specialized training in Industrial Engg Lab, Software Lab, Ergonomics Lab
- Software exposure: SPSS, MATLAB, MS Project, Witness, CATIA, MATLAB, MVTA
- Industry Exposure through 'Industrial Training' (2-3 months) and 'Industry Projects' (6 months)
- Average Faculty experience is > 20 years
- Industry exposure/Projects/Consultancies: RUBCO, ISRO, FPI-OEN, EASTERN CONDIMENTS, TELK, KMML, STAR PIPES, KEL, MALABAR CEMENTS, KAL, HLL, KERALA STATE CONSTRUCTION CORP, PKC, AUTOCAST, IRE, NATPAC, NTPC

Course and Outcome

- > 60 journal and conference publications in past three years
- held 3 conferences
- held > 15 Industry Experts Sessions

University Rank Details

2013-14	2012-13	2011-12
M.Tech 1 st , 3 rd	M.Tech 1 st , 2 nd	M.Tech 1 st , 2 nd , 3 rd

MTech Alumni

<u>Public Sector</u> IPS (Govt of India) Irrigation Dept (Govt of Kerala) ISRO and VSSC (Trivandrum) Kerala Productivity Council (Kochi) Private Sector MRF (Kottayam) V-Guard Industries Ltd (Kochi) Entuple Bangalore Lamprell Energy Ltd (UAE) TCS (Trivandrum)

Educational Institutions: RIT (Kottayam), METS (Mala), AJCE (Kanjarapally), SCMS (Kochi), SGITS (Kottayam), MEC (Ettumanoor), KITS (Kottayam), CoE (Kidangoor), CoE(Alleppy), SBCS (Kayamkulam) Higher Studies (PhD) NIT, Calicut CUSAT, Kochi Pondicherry University Kerala University



- RUBCO Kottayam
- Centre for Nano science and Nano Technology, M.G University

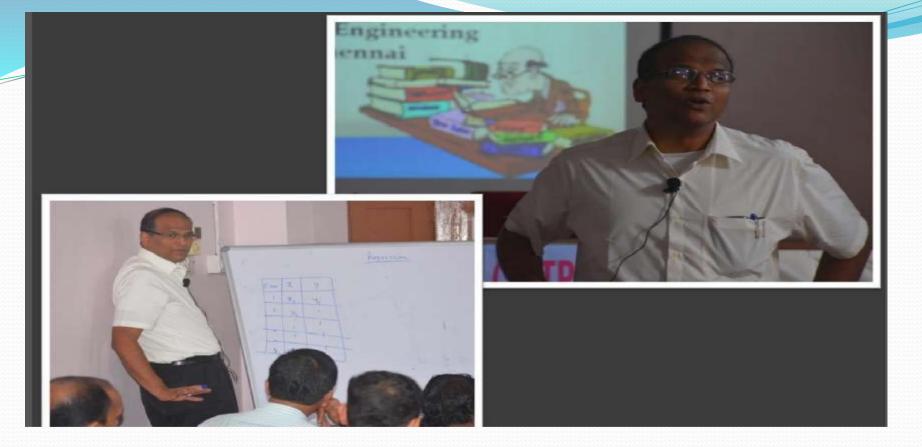
MoUs

- Irrigation Department of Kerala, Govt of Kerala
- Tropical Institute of Science, Kottayam
- Cranes Software, Bangalore
- Entuple Technologies, Bangalore
- Poornam Vision Software Ltd, Cochin
- OTTOTRACTIONS, Empanelled Accredited Energy Auditor, Bureau of Energy Efficiency, Government Of India
- C-DAC(Centre for Development of Advanced Computing) Trivandrum

Expert Lecture Sessions



Prof. John Abraham from Purdue University, USA handling session on STTP on Computational Techniques for Engineering Analysis



Prof. C. Balaji, IIT Madras handling a session during STTP on Optimization Methods and Application

Mechanical Engineering



Prof. Srinivasan, IIT Madras handling a session during STTP on Research Avenues in Operations Management

RITEXPO 2016











- Start new courses: M.Tech (Engineering Design)
 M.Tech (Mechatronics)
- Start Research Center (Mechanical Engg)
- Start Center of Excellence in Ergonomics
- Focus on Thrust Areas: Design

Industrial Engineering Energy

THANK YOU