



V.V. SANGHA'S
RAO BHADUR Y. MAHABALESWARAPPA ENGINEERING COLLEGE, BALLARI

YANTRIKA

DEPARTMENT OF MECHANICAL ENGINEERING
&
DEPARTMENT OF INDUSTRIAL AND PRODUCTION ENGINEERING

Address: Cantonment, Ballari, Karnataka 583104

Phone:08392 244809 Web: www.rymec.in E-mail: rymecyantrika@gmail.com

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GO KART RACING



A group of nine students of IVth semester Mechanical Engineering, Vachan A M, Sanath Kumar C M, Vignesh Kandra, Vinod Kumar N R, Vidya Sagar C K, Rajshekhar M, Prem Sagar, Manish, & Suraj Joshi, forming a team by name XLR8, under the guidance of Prof. Kotresh Sardar have designed and fabricated the racing car in house and participated in "Go Kart Racing" event at Bengaluru on 25th- 28th Feb 2016. Project cost is around 1.2 lakh rupees.

AURA RACING



AURA RACING TEAM MEMBERS

- A N Datta
- Angadi Varun Kumar
- Chetan G B
- Dileep Ganti,
- Deniel Remonds
- H M Shravan S Swamy
- Md.Shoaib Ashrafi
- Syed Mohammed Afzal

Final Year students of Mechanical Engineering formed a team of Eight Members naming "Aura Racing Team", with the Financial Assistance by College Management have Designed and Fabricated a Hybrid car which works on a technology that can improve the efficiency and boost the power comparing to normal petrol/gasoline engine by the introduction of a secondary power supply system from an Electric Motor powered by batteries, which are rechargeable by Kinetic Energy Regenerative System.

Under the Guidance of
Dr. Nagaraj Kori
Prof. Deepak C.

Cost of the Project
Rs. 3.8 lakhs



PUBLICATIONS



Sl. No.	Title of Paper	Publication details
Dr. K Veeresh, M.E, Ph.D & VithalRaoChauhan, M.Tech (Ph.D)		
1	Effect of Tribological behavior of hematite filled hybrid composites- A Taguchi approach	Vol. 2, Issue 1, May 2016, IJE-RAT
Dr. G Jagannatha Reddy, M.E.,Ph.D		
2	Experimental investigation of welder modification at PLTCM	Vol. 3, Issue 12. Feb 2016, IJSRD
M R Indudhar, M.E, (Ph.D)		
3	Effect of injection timing and injection pressure on the performance of biodiesel ester of hongeoil fuelled common rail direct injection (CRDI) engine.	Vol. 7, No. 4, 2015, PP. 37-48, IJEST, ISSN 2141-2839
M Chandragowda, M.Tech, (Ph.D)		
4	Experimental investigation of multi cylinder diesel engine using diesel, jatropha oil and apricot oil	Vol. 13, Issue 3, May-June 2016, IOSR journals
Y Mallikarjuna, M.Tech		
5	Study on failure of dephlagmotor in NH ₃ distillation column	Vol. 4, Issue 2, Feb 2016, IJME
VithalRaoChauhan, M.Tech, (Ph.D)		
6	Effect of cerium oxide as filler material on E-glass fibre/epoxy reinforced polymer composites	Vol. 6, Issue 4, Page No. 7425-7428, April 2016, IJDR

Start of the Publishing Cycle



Student Achievements



Students of 4th semester Padma, Nikitha and Rashmi Secured 2nd prize in 'AEROMODELLING' in Insignia fest organised at SDM College of Engineering & Technology, Dharwad on 17th March 2016

VTU Rank Holders for the Academic Year 2014-15

III Rank



VASUDENDRA H.K
3VC11IP009



VIII Rank



A. LAVANYA
3VC11IP001



Aruna Kumari student of 4th semester Industrial & Production Engineering participated in Inter Zonal Women's Hockey Tournament which was held at RYMEC, Ballari during 18-04-2016 to 23-04-2016 and has secured First place

CONGRATULATIONS
congratulations

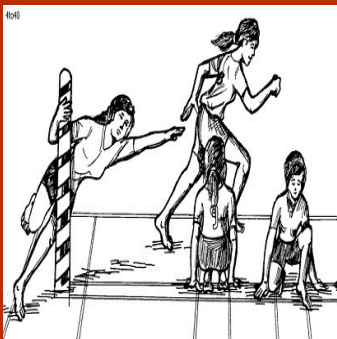
Extra Curricular Activities by Students



VOLLEY BALL



Students of IV semester Girish K M, Anwar S, Arogya Dass, Karthik A, Amar Nayak, Gurubasavaraj and Shivakumar of II semester participated in Volley Ball Zonal Level Tournament held at RYMEC, Ballari on 29th Feb & 1st Mar 2016 and secured Third Prize.



KHO-KHO



Students of Pre-Final & Final year, Girish K M, Pramod, Devraj, Rajkumar, Yashwanth, Sharane Gouda, Manjunah Pujari & Anwar participated in Kho-Kho Zonal Level Tournament held at RYMEC, Ballari on 8th March 2016 and have secured FIRST PLACE.



**SHUTTLE
BADMINTON**



Karthik A

Karthik A of IV Semester and Gurubasava N M of VI Semester secured prizes in Inter Zonal Shuttle Badminton at NMIT Udupi



Gurubasava N M

Faculty Development Program/ Workshops

- Two Day Faculty Development Program on 'SYSTEM DYNAMICS' was conducted on 18th and 19th February 2016. Resource Person Dr. Virupaxi Bagodi, Professor, Mechanical Engineering, Government Engineering College, Haveri speaking on



- One Day Seminar on 'Wi-Fi Networking & Automation' was conducted on 27th February 2016 by Selenium & Python. Resource Persons Sri. Ayyanna Gurikar Sri. Anil Pradha were present.

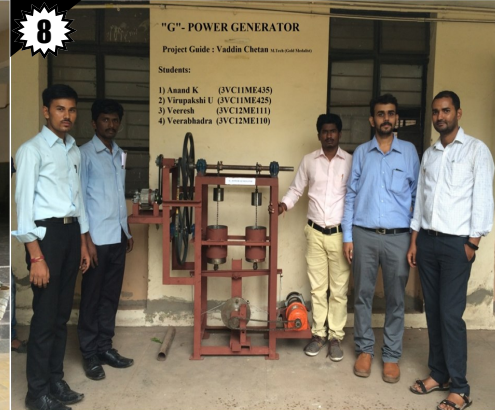
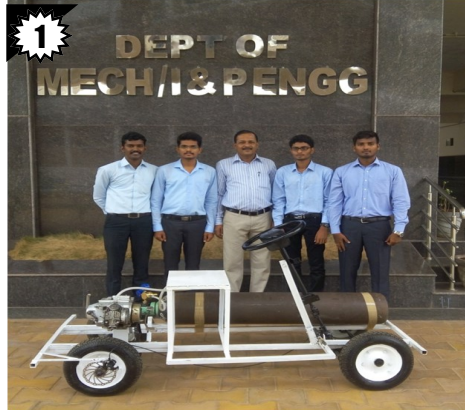
- Sri. Vithal Rao Chavan attended FDP Program on "Finite Element Analysis from Concept to Applications" organized by the department of Mechanical Engineering held during 26th, 27th and 28th March 2016



Final Year Projects

Projects Undertaken by Final Year Students

1. AIR CAR
2. MANUALLY OPERATED RICE DEHUSKING MACHINE
3. SEGWAY VEHICLE
4. TRICYCLE WATER FILTER FOR RURAL AREAS
5. FIRE EXTINGUISHER USING ANDROID APPLICATION
6. PNEUMATICALLY ASSISTED SIDE STAND RETREIVING SYSTEM
7. SQUARE THREAD BASED LIFTING SYSTEM
8. G-POWER GENERATION



Engineering Knowledge

Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

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.

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.

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.

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.

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.

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.

Ethics

Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

Individual and Team Work

Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

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.

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.

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.

DEPARTMENT OF MECHANICAL ENGINEERING

VISION OF THE DEPARTMENT

To Produce Professionally Excellent and Globally Competent Technocrats needed to Meet the Challenges in the Emerging Fields of Mechanical Engineering

MISSION OF THE DEPARTMENT

- To provide quality education in Mechanical Engineering and Management.
- To Establish a Continuous Industry Institute Interaction, Participation, Collaboration to Contribute Skilled Mechanical Engineers.
- To Impart Human, Socio-Ethical values and Entrepreneur skills among Mechanical Engineers.
- To Promote Research and Development (R & D) and Innovative Technologies in the Emerging Areas of Mechanical Engineering.

PROGRAM EDUCATIONAL OBJECTIVES

- Graduates of Mechanical Engineering shall Develop Strong Academic Foundation for Successful Professional Career.
- Graduates of Mechanical Engineering Acquires skills to excel in the area of Mechanical Engineering both in Industries and Academics.
- Graduates of Mechanical Engineering Possess awareness towards Higher Education, R & D and Socio-Ethical values.

PROGRAM SPECIFIC OUTCOME'S

- Graduates are able to Design, Analyze and Develop Mechanical Systems.
- Graduates are Capable of Developing Research Skills in Self Sustainable Energy sources and Composite Materials.

Trendsetters in Mechanical Science

A parable of two tools...



- Cugnot's fardier à vapeur, 1771
- Bugatti Veyron, 2010
- Speed 2.25 mph
- Speed 250 mph

The cars we researched on

1. Fardier à Vapeur:

In 1769, Nicolas-Joseph Cugnot designed and constructed the first working self-propelled vehicle for human travel. Perhaps best described as a power tricycle about the size of a small present-day bus, it had one wheel at the front under the boiler and two-cylinder steam engine, and two wheels at the back under the freight area.

Top speed: 3.6 kmph (approx.)



Nicolas Cugnot