

||Jai Sri Gurudev||
Sri Adichunchanagiri Shikshana Trust (R.)
BGS INSTITUTE OF TECHNOLOGY
[A Constituent College of Adichunchanagiri University]
BG Nagara – 571448, Nagamangala Taluk, Mandya District, Karnataka State



Vision: BGSIT is dedicated to creating tomorrow's engineers by providing quality engineering education with human values.

Mission:

- To achieve excellence by providing quality technical education.
- To achieve professional training to meet the requirements of the industry.
- To create effective workforce & good leaders to support the economic growth and community development in the nation.

EDITORIAL TEAM:

- Dr. B. K. Narendra, Principal
- Prof. M. Raja Ram, HOD
- Dr. L. Ranganatha Swamy
- Dr. Hemaraju

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PRINCIPAL's View:

It is my pleasure to congratulate the editorial board on this pleasant occasion of releasing the newsletter for the year 2017-18. It is great to find a considerable number of winners and participants in curricular, co-curricular and extra-curricular activities which certainly prove that our faculty and students are adequately equipped and possess necessary quality skill-sets to bring such laurels to the institution. I wish that this number may grow in the years to come. I am sure that publishing a newsletter of this sort containing the achievements of the MED-BGSIT family will be recognition to them. I wish them all the very best for future endeavours.



HOD Says...:

My heartily welcome to the maiden issue of our Department Newsletter – ‘YANTRIK’. I am indeed very happy and proud in bringing this newsletter about the latest developments and programmes in the department. In future, Newsletter acts as an internal communication channel among the alumni, faculty, students and experts in Mechanical Engineering. We are very much grateful to the Management and Principal for their continuous encouragement, inspiration and support.

“Necessity is the mother of Invention”. Initiations, Inspirations, Inventions, Innovations and Challenges are never-ending programmes of the universe. Every investigation big or small counts but always begins with a single step. ‘Yantrik’, the ‘Evergreen’ all rounder engineers have immense potential within them. This potential can be transformed into academic and research activities by waking up their minds.

CONGRATULATIONS

The following faculty had received the **Doctorate Degree** Certificates in 17th Annual Convocation of Visvesvaraya Technological University, Belagavi on 09th January, 2018:



Dr. Ranganatha Swamy. L

“Studies on the Impact of Oxygenated Fuel and Water Injection with Exhaust Gas Recirculation on the Diesel Engine



Dr. Hemaraju

“Studies on Elastic, Inelastic and Damage of Metallic Surface Exposed to Hard Body”.

BEST TEACHER AWARDS

2016 – 17



Mr. Hemaraju Mr. K. S. Sudeep Kumar

2017 – 18



Dr. Ranganatha Swamy. L Mr. K. C. Vinodh

PUBLICATIONS:

1. Dr. Ranganatha Swamy. L, “Effect of Using Exhaust Gas Recirculation on the Performance, Combustion and Emissions of Diesel Engine with Manifold Injected Ethanol and Diesel-Ethanol Blend”, Universal Journal of Petroleum Sciences, 5, 2017, pp 20-36.
2. Nishchitha. K. M, “Studies on Performance and Emission of Ceramic Coated CI Engine under various blends of Pongam and Jatropha Bio-diesels”, ICAMES, June 2017.
3. Dr. Hemaraju, Pallavi. K, Shivaprasad. M, Madhu. K. M and Sandesh. B. S, “Design and Fabrication of Pepper Separator Machine”, International Journal of Current Research in Life Sciences, Vol. 07, No. 04, 2018, pp 1679-1681.
4. Sudeep Kumar. K. S, “Impact of Bio-diesel Fuel on Durability of CI Engines – A Review”, IOP Conference Series, Material Science and Engineering, 376, 2018.
5. Sudeep Kumar. K. S, Varshitha. G, Praveen Kumar. D, Kiran. I. R and Abhishek. C. J, Fabrication and Application of Briquette Making Machine, 1st National Conference on Green Energy, Environment and Sustainable Development on 9-10th March, 2018, at Presidency University, Bengaluru.

INVITED TALKS:

1. Prof. Hemaraju delivered technical talk on “Alloy Materials and its Applications” on 17th September, 2017 at SJ BGS Polytechnic, BG Nagara.
2. Prof. Ranganatha Swamy. L, delivered technical talk on “Alternate Fuels” on 19th September, 2017 at SJ BGS Polytechnic, BG Nagara.
3. Prof. M. Raja Ram delivered technical talk on “Ethical Issues in Engineering Practice” on 16th March, 2018 at Government Polytechnic, Nagamangala.

FACULTY DEVELOPMENT PROGRAMME (FDP) ORGANIZED:



5-Day FDP on “CATIA and its Industrial Applications” was organized in association with ASP Design Center Private Limited, Mysuru from 22nd – 26th January 2018. The objective of the FDP was to teach and train faculties and students on CATIA, which is widely used in the industries like aerospace, defence, automotive, ship building, etc.

Mr. Anil. S. P, Director, ASP Design Centre Private Solutions, Mysuru deliberated and shared the knowledge to the audience about the significance of CATIA Software (V5 R21) and its industrial applications. Dr. G. B. Krishnappa, Dean (R&D), VVCE, Mysuru informed the importance of CATIA in the current industrial era.

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**STUDENT DEVELOPMENT PROGRAMME (SDP) ORGANIZED:**



Student Development Programme on CATIA Software (V5R21) was organized for 5<sup>th</sup> Semester BE (Mechanical) students. This programme was conducted in association with ASP Design Center Private Limited, Mysuru from 22.01.2018 to 02.02.2018. Computer Aided Three-dimensional Interactive Application (CATIA) is a multi-platform software suite for CAD, CAM, CAE, PLM & 3D developed by French company Dassault Systems.

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FACULTY DEVELOPMENT PROGRAMMES ATTENDED:

Mr. Pradeep. H, Faculty has attended TEQIP-III Sponsored One Week FDP on ‘Pedagogy Training in Technical Education’ from 16th to 20th January, 2018, organized by VTU Human Resource Development Centre for PG Studies, Muddenahalli, Chickballapur.

Mr. Santhosh Kumar. T. C, Faculty has attended FDP on “Recent Trends in Industrial Practices, RTIP-2018” held during 11th to 13th April, 2018, organized by the Department of Marine Engineering at Srinivas Institute of Technology, Mangaluru.

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**Departmental Activities:**



**MECH ALOHA 2K18** – A Farewell function to 8<sup>th</sup> Semester BE (Mechanical) students was organized on 04.05.2018 by Junior students (2<sup>nd</sup>, 4<sup>th</sup> & 6<sup>th</sup> Sem. BE). Mr. K. N. Shivananda, Manager (Deco & Utility), H&R Johnson (India), A Division of Prism Cement Limited, Kunigal inaugurated the function and gave a motivational speech about the industrial requirements and how to cope up the targets of the industry.

Mr. Vivek Veeraiah, Founder & CEO, EdVista Consulting Pvt. Ltd., Bengaluru and Dr. S. R. Subramanya, Chief Executive Officer of Exskillence, Bengaluru gave motivational talk about the avenues in higher education at overseas for 6<sup>th</sup> Sem. BE (Mechanical) students. This programme was conducted on 27.04.2018.



On 17.04.2018, an Orientation Programme was arranged for 8<sup>th</sup> Sem. BE (Mechanical) students by Mr. Suresh G. Rao, Chief Executive Officer, Centre of Excellence in Aerospace & Defence, VTU Regional Office, Bengaluru. He spoke about the present scenario and importance of the foundation level and advanced level training programmes which are structured to provide the right exposure to students on the industry practices. This would help in making the student's industry ready and productive right from day one upon recruitment in the Industry.

Mr. Prasannakumar Shankar, Managing Director & CEO, Maxpertise Technology Labs Private Limited, Bengaluru had an interactive session with 4<sup>th</sup>, 6<sup>th</sup> & 8<sup>th</sup> Sem. BE (Mechanical) students on 04.04.2018. He explained about the skills development in the areas of Design Skills, Manufacturing Engineering Skills, Soft Skills, Personality Development Skills, Employability Skills, etc.



Mr. Venugopal. R, Promoter & Managing Director of Venjay Institute of Automation, Bengaluru had an interactive session with 8<sup>th</sup> Sem. BE (Mechanical) students on 03.04.2018 about industrial automation and applications in small scale industries, medium scale industries and large scale industries. He gave a presentation on the functions of PLC SCADA & DCS in industrial automation and about their training institute which has hands-on training to students who are willing to pursue their career in automation.



On 15.03.2018, Mr. Kiran Kumar, Trainer from National Skill Development Corporation (RIIT, Mysuru) had an interactive session with 4<sup>th</sup> and 6<sup>th</sup> Sem. BE (Mechanical) students about "Skill On Wheels", the project initiated by the Government of India for youth. He explained about the objectives of the programmes like Skill India, 3-I Summit, Ideapreneurs, Skillathon, etc.

On 09.02.2018, Mr. Nagaprasad, Motivator from Hyderabad addressed the students of 4<sup>th</sup> & 6<sup>th</sup> Sem. BE (Mechanical). He mentioned about the challenges of life and how to face & resolve. He quoted a statement to our students that – "It all started with a belief that there is absolutely nothing that is impossible. All it requires is self confidence and determination".



Two-Day Workshop on Additive Manufacturing was organized for 5<sup>th</sup> & 7<sup>th</sup> Sem. BE (Mechanical) students on 04.04.2017 & 05.04.2017 by Mr. Anil. S. P, Managing Director, ASP Design Solution Private Limited, Mysuru. He gave presentation on Applications of 3D Printing, Materials used for 3D Printing, Levels of Machines used for 3D Printing, Comparison of other Manufacturing methods with 3D Printing method.

**Service Activity:**



Voluntary Blood Donation Camp was organized in collaboration with Rashtrottthana Blood Bank, Bengaluru and Adichunchanagiri Hospital on 14.03.2018 at campus. Around 172 sachets were collected from students and staff members. Dr. T. M. Manohara, Medical Superintendent of Adichunchanagiri Hospital & Research Center, BG Nagara inaugurated the programme and gave the speech on usefulness of donating the blood.











**Project Models Demonstration:**



8<sup>th</sup> Semester BE (Mechanical) students exhibited their projects at State level Jnana Vijnana Tantrajana Mela held at Sri Kshetra Adichunchanagiri on 19<sup>th</sup> & 20<sup>th</sup> February 2018. Projects titled Design and Fabrication of Leaf Log Making Machine, Design and Fabrication of Pedal Powered Water Pumping & Purification Machine, Digital Fuel Level Indicator for Automotives & Design and Fabrication of Vertical Axis Wind Turbine were the project exhibits at Mela.

**::STUDENT TOPPERS::**

| 7 <sup>th</sup> Sem. BE: VTU November / December 2017 Examinations                  |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |
| K. R. Balaji                                                                        | M. G. Deepak                                                                        | M. S. Swaroop                                                                         |

|                                                                                                                                   |                                                                                                                                    |                                                                                                                               |                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 4BW14ME009<br>83.89%                                                                                                              | 4BW14ME013<br>81.45%                                                                                                               | 4BW14ME054<br>79.78%                                                                                                          |                                                                                                                                |
| <b>5<sup>th</sup> Sem. BE: VTU November / December 2017 Examinations</b>                                                          |                                                                                                                                    |                                                                                                                               |                                                                                                                                |
| <br>Chetan S Biradar<br>4BW15ME010<br>79.50%     | <br>Gangadhar Gowda. N. S<br>4BW15ME015<br>74.50% | <br>Bhoomika. S. R<br>4BW15ME008<br>74.38% |                                                                                                                                |
| <b>3<sup>rd</sup> Sem. BE: VTU November / December 2017 Examinations</b>                                                          |                                                                                                                                    |                                                                                                                               |                                                                                                                                |
| <br>Prasanna Kumar. K. R<br>4BW16ME033<br>77.88% | <br>Avinash. L. M<br>4BW16ME004<br>76.75%         | <br>Pramoda. B. S<br>4BW16ME032<br>72.88%  |                                                                                                                                |
| <b>8<sup>th</sup> Sem. BE: VTU May / June 2018 Examinations</b>                                                                   |                                                                                                                                    |                                                                                                                               |                                                                                                                                |
| <br>K. R. Balaji<br>4BW14ME009<br>88.67%       | <br>Sachin<br>4BW14ME041<br>86.27%              | <br>Deepu. D. K<br>4BW14ME013<br>84.13%    | <br>Suprith. M. V<br>4BW14ME051<br>84.13% |

**VISION:**

Producing competent and sustainable Mechanical Engineers through Excellence, Innovations and Ethics.

**MISSION:**

**M1:** Offering quality Education by competent faculty.

**M2:** Providing adequate infrastructure and learning ambience.

**M3:** Developing inclination towards higher education, research, entrepreneurship and professional ethics.

**M4:** Promoting interaction with industries.

**PROGRAMME EDUCATIONAL OBJECTIVES (PEO):**

Our graduates will:

**PEO-1:** Graduate will pursuing successful career & higher education.

**PEO-2:** Graduates will be able to design, analyze, fabricate & manage applications of mechanical engineering.

**PEO-3:** Graduates will display professional ethics to work in a team & lead the team by effectively communicating the ideas.

**PEO-4:** Graduates will practice lifelong learning

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PROGRAMME SPECIFIC OUTCOMES (PSO):

Mechanical Engineering Programme prepares graduates:

PSO-1: Ability to acquire competencies in designing, analyzing and evaluating the mechanical components.

PSO-2: Ability to work professionally by applying manufacturing and management practices.

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#### **PROGRAMME OUTCOMES (PO):**

- **PO – 1: Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **PO – 2: 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.
- **PO – 3: 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.
- **PO – 4: 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.
- **PO – 5: Modern Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- **PO – 6: 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.
- **PO – 7: 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.
- **PO – 8: Ethics Apply:** Ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **PO – 9: Individual and Team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **PO – 10: 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.
- **PO – 11: 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.
- **PO – 12: Life-long Learning:** Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.





Poojya Sri Mahaswamiji, Principal, HOD and Faculty  
with the Outgoing Batch Students (2014-18)

**QUOTES (At the end of each page)**

- Opportunities don't happen. You create them.
- Love yourself. It is important to stay positive because beauty comes from the inside out.
- Good, Better & Best. Never let it rest. Till your good is better and your better is best.
- A good teacher can inspire hope, ignite the imagination and install a love of learning.
- If you do what you always did, you will get what you always got.
- To live a creative life, we must lose our fear of being wrong.
- Good things come to people who wait, but better things come to those who go out and get them.
- Try not to become a person of success, but rather try to become a person of value.
- All our dreams can come true if we have the courage to pursue them.