Shri G. S. Institute of Technology and Science, Indore

Minutes of Board of Studies of Electronics and Instrumentation Engineering

Date: 13/08/2021

A board of studies (BOS) meeting for Electronics and Instrumentation Engineering was held in the Department on 13th August 2021 at 2PM. External members attended the meeting On-line on Google meet platform. Following members were present.

1. Dr. R .S. Gamad	Chairman (BOS)
2. Dr. D. K. Mishra	Member
3. Dr. P. P. Bansod	Member
4. Mr. D.S. Ajnar	Member
5. Mr. Rajesh Khatri	Member
6. Mr. R. C. Gurjar	Member
7. Dr. Santosh Vishwakarma	External Expert, IIT Indore
8. Mr. Anuj Upadhyay	External Expert (Industry)
9. Dr. Vaibhav Neema	Special Invitee, IET DAVV Indore
10. Dr. Anjulata Yadav	Special Invitee, E&TC, SGSITS

The deliberations of meeting are as under:

1. The Program Outcomes (POs), Program Educational Objectives (PEOs) and Program Specific Outcomes (PSOs) were discussed and approved.

2. The proposed AICTE model scheme was discussed in the meeting. As per the AICTE model scheme, the **three** new subjects (i) Environmental Science (ii) The Constitution of India **(iii) Essence of Indian Traditional Knowledge** were introduced in Second Year III sem and IV sem and **III year V sem** respectively. These **three** subjects will be Non-credit subjects with sessional work. This scheme will be effective from July2022 session. As there were no changes in the scheme and syllabus of PG course, the same scheme is approved.

The meeting ended with vote of thanks.

Signature of members of BOS members:

1. Dr. R .S. Gamad
2. Dr. D. K. Mishra
3. Dr. P. P. Bansod
4. Mr. D.S. Ajnar
5. Mr. Rajesh Khatri
6. Mr. R. C. Gurjar

7. Dr. Santosh Vishwakarma

8. Mr. Anuj Upadhyay

9. Dr. Vaibhav Neema

10. Dr. Anjulata Yadav

Encl.: (i) Scheme and Approved Syllabus of UG
(ii) Scheme and Approved Syllabus of PG

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Department of Electronics & Instrumentation Engineering

Program Outcomes (POs)

Course: B. Tech. (Electronics and Instrumentation Engineering)

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 modeling to complex engineering activities with an understanding of the limitations.

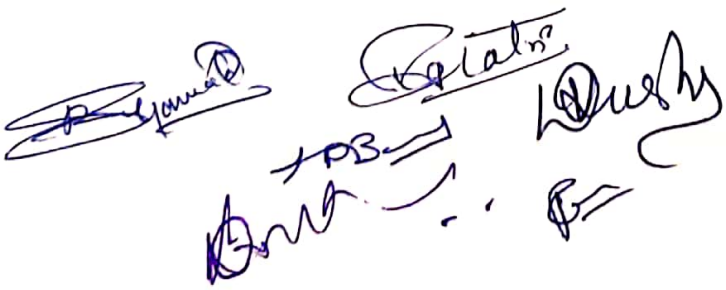
PO 6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

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.

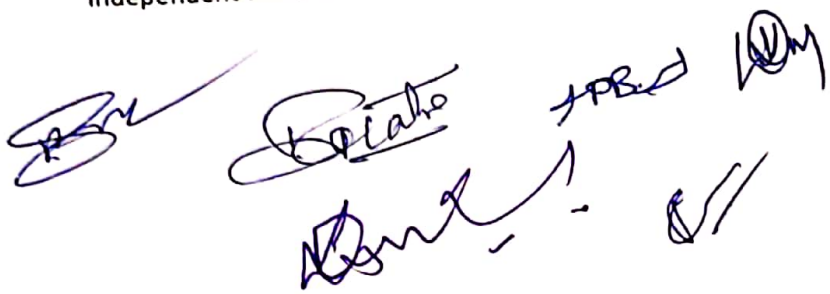
PO 9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

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 life-long learning in the broadest context of technological change.



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Department of Electronics & Instrumentation Engineering

Program Educational Objectives (PEOs)

Course: B. Tech. (Electronics and Instrumentation Engineering)

PEO 1: PROFESSIONAL DEVELOPMENT-

To develop in the students the ability to acquire knowledge of Mathematics, Science & Engineering and apply it professionally within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability with due ethical responsibility.

PEO 2: CORE PROFICIENCY-

To provide ability to identify, formulate, comprehend, analyze, design and solve engineering problems with hands on experience in various technologies using modern tools necessary for engineering practice to satisfy the needs of society and the industry.

PEO 3: TECHNICAL ACCOMPISHMENTS-

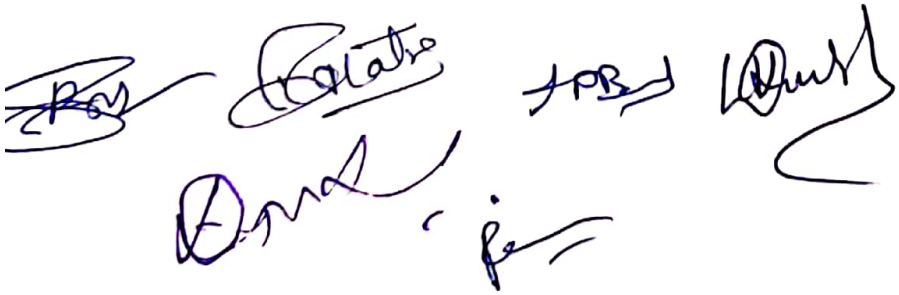
To equip the students with the ability to design, simulate experiment, analyze, optimize and interpret in their core applications through multi-disciplinary concepts and contemporary learning to build them into industry ready graduates.

PEO 4: PROFESSIONALISIM-

To provide training, exposure and awareness on importance of soft skills for better career and holistic personality development as well as professional attitude towards ethical issues, team work, responsibility, accountability, multidisciplinary approach and capability to relate engineering issues to broader social context.

PEO 5: LEARNING ENVIRONMENT-

To provide students with an academic environment and make them aware of excellence, develop the urge of discovery, creativity, inventiveness, leadership, written ethical codes and guidelines and the life-long learning to become a successful professional in Electronics and Communication Engineering.



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Program Specific Outcomes (PSOs)

Course: B. Tech. (Electronics and Instrumentation Engineering)

PSO 1: The ability to analyze, design and implement application specific electronic system for complex engineering problems for analog, digital domain, communications and signal processing applications by applying the knowledge of basic sciences, engineering mathematics and engineering fundamentals.

PSO 2: The ability to adapt for rapid changes in tools and technology with an understanding of societal and ecological issues relevant to professional engineering practice through life-long learning.

PSO 3: Excellent adaptability to function in multi-disciplinary work environment, good interpersonal skills as a leader in a team in appreciation of professional ethics and societal responsibilities.