



# One Week Faculty Development Program on



## Advanced Materials & Manufacturing Techniques - 2023 (AMMT - 2023)

Organized by

# B.M.S. Evening College of Engineering & Department of Industrial Engineering and Management

B.M.S. College of Engineering  
Bull Temple Road, Bengaluru - 560019



In association with  
ISTE - BMSCE Chapter  
&  
Visvesvaraya Technological University (VTU)  
Belagavi

Date : 9<sup>th</sup> - 14<sup>th</sup> January 2023

## About BMSECE

BMS Evening College of Engineering (BMSECE) established in the year 1973 under BMS Educational Trust which had already established prestigious B.M.S College of Engineering (BMSCE) which came forward to extend its existing facilities and infrastructure to run the Evening College and obtained the approval of DTE, Govt. of Karnataka. BMSECE is the first aided institution from Karnataka offering undergraduate degrees in engineering program under lateral entry scheme for working diploma candidates with a minimum of two year's work experience. Presently the college is affiliated to VTU, Belagavi. Initially, only three core engineering disciplines viz Civil Engineering, Mechanical Engineering and Electrical & Electronics Engineering were started, later Electronics & Communication Engineering and Computer Science Engineering were added. The college has well qualified & experienced faculty and committed staff to provide effective education to the students. A well maintained campus provides good academic ambience, in addition to provide academic knowledge and skills, opportunities are created groom and develop further. Many of the students have continued their studies further and obtained Masters and Doctoral degree after passing out from this institution. Some of them have even reached the highest positions such as Directors, General Managers and CEO's in private and public sectors.

## About Department

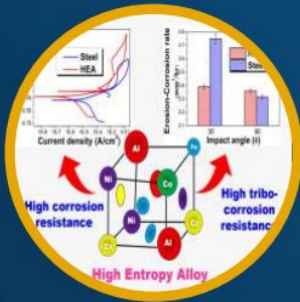
The IE&M department was established in 1979. The department has an intake of 60 students. The department offers undergraduate degree in Industrial Engineering and Management. It emphasizes thrust on productivity, management, and software engineering. The department houses suitable labs to give students a competitive edge. It enables them to fit in as the key link between the technical personnel and the management in any organization and thus contribute to the organization's growth and development including profitability. The department is VTU recognized research centre for Ph.D. and M.Sc. Engineering degrees. The lab of the department houses top of the line computers to aid students in Robotics, CIM, CAD/CAM, ERP, Modeling, Drafting and Simulation. The department also has its own library and a student activity centre. The department forum is called as Industrial Engineering Club (INDEC). The department has 11 qualified staff out of them 8 are doctorates in various Industrial Engineering areas. The students joining this department will be trained to perform in Engineering Management, Production and Software based Industry practices. It is also a QIP centre for pursuing PhD course in Industrial Engineering.

## About FDP

The objective of this programme on "Advanced Materials & Manufacturing Techniques - 2023" is to enable early stage researchers, young faculty, as well as established faculty members, to gain exposure to insightful developments taking place in the dynamic world of material characterization. The program will be extremely beneficial to the participants from diverse backgrounds such as metallurgy, materials science, mechanical engineering, physics and chemistry alike, owing to the versatility of the advanced characterization methods that come across in the scientific world. This Course is structured to develop the faculty and research scholar's skill in materials characterization techniques. The course is designed to give broad prospective of major characterization tools with hands on in conducting and analysis of data. The course is organized in a module format, with each module having lectures, tutorial and demonstration sessions. The lectures and demonstration sessions would be provided by experts from premier institutes and BMSCE who are active in the materials characterization research area.

## Who Can Attend

Faculty members of AICTE approved Polytechnic & Engineering Colleges.  
Research scholars, Professionals working in industries.



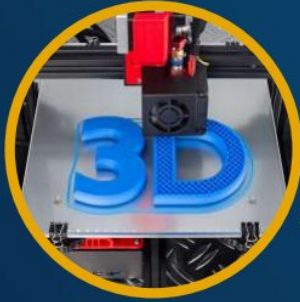
### Day – 1

Advanced composites for aircraft applications. High entropy alloys and Bio Coating materials.



### Day – 2

Taguchi Technique with hands on experience. [DOE, Response Surface Methodology (RSM), Taguchi Techniques, Multi Objective & Optimization], Crashworthiness of FRP  
**Morning: Theoretical Session.**  
**Afternoon: Lab Session.**



### Day – 3

Thermal characterisation of material, Chalcogenide Glasses, Additive Manufacturing Technique.  
**Morning: Theoretical Session.**  
**Afternoon: Lab Session.**



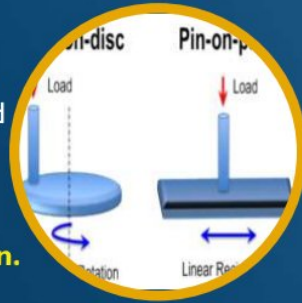
### Day – 4

Single Point Diamond Turning and Recent Developments, Micro machining & machinability characterization of advanced materials.  
**Morning: Theoretical Session.**  
**Afternoon: Lab Session.**



### Day – 5

Recent developments in Nano-materials & Technology. Fractograph study of advanced materials: Microstructure, SEM, EDS, XRD, TEM, FESEM (Field Emission SEM).  
**Morning: Theoretical Session.**  
**Afternoon: Lab Session.**



### Day – 6

Tribological characterization of advanced materials. Surface Modification using LASER Shock Peening  
**Morning: Theoretical Session.**  
**Afternoon: Lab Session.**

**Resource Persons:**  
 Experts from Industry, Professors from premier institutes and BMSCE

**For Registration Click Below:**

<https://forms.gle/HeprYk8ccclNwXo58>

### Registration Fee Details:

₹ 1000/- for Non ISTE Members.  
 ₹ 500/- for ISTE & In-house Members.  
 Registration fees is to be paid through online transfer to Indian Bank, Hanumanthnagar branch, Bengaluru.  
 A/C No:20274180988,  
 IFSCCode:IDIB000B607



### Important Dates:

Last date for receipt of applications:  
**5<sup>th</sup> January 2023**

### Chief Patrons:

Dr. B. S. Ragini Narayan, Donor Trustee & Chairperson, BMSET  
Dr. P. Dayananda Pai, Chairman, BOG, BMSCE  
Sri. Aviram Sharma, Trustee, BMSET  
Sri. Ravi Venkatesam, Trustee, BMSET  
Dr. S. Vidyashankar, Vice Chancellor, VTU, Belagavi

### Patrons:

Dr. Muralidhara S, Principal, BMSCE  
Dr. Rudra Naik, Principal, BMSECE  
Dr. Suresh Ramaswamy Reddy, Vice Principal (Academic), BMSCE  
Dr. Bheemsha Arya, Vice Principal (Admin), BMSCE  
Dr. B. E. Rangaswamy, Registrar (Evaluation), VTU, Belagavi

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Dr. Giridhara G.  
Dr. M. C. Krishnamurthy  
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Dr. Rathanraj K. J.  
Dr. H. P. Jagadish  
Prof. R. Umesh Naik  
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Dr. B. N. Sarada  
Dr. Vardhaman S. M.  
Dr. Lakshminarayana C.  
Dr. J. Sharana Basavaraja  
Dr. Y. S. Rammohan  
Dr. Y. K. Suneetha  
Dr. P. Jayarekha  
Dr. M. S. Dharmaprakash  
Dr. Shashikumar G.  
Dr. Shailaja V. N.

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Dr. Rajath Hegde, Principal, Acharya Institute of Technology, Bengaluru  
Dr. Rama Narasimha K, Principal, KSSEM, Bengaluru  
Dr. T. N. Sreenivasa, Principal, Atria Institute of Technology, Bengaluru  
Dr. Pundarika Ganga Naik, Principal, GEC, Ramanagara  
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Dr. R. M. Mahalinge Gowda, Principal, PESCE, Mandya.  
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Dr. Jayapal R., Principal, RVITM, Bengaluru  
Dr. Krishnamurthy G. N., Principal, BNMIT, Bengaluru  
Dr. M. U. Aswath, Principal, BIT, Bengaluru

### Convener:

Dr. B. Ramesh Nayak,  
Dept. of IEM, BMSCE

### Co-Convener:

Dr. Ravikumar M,  
Dept. of ME, BMSECE

### Programme Co-ordinator:

Dr. Kavitha Rani N., Dept. of IEM, BMSCE

### Organising Committee:

Prof. Reddy Naik J.  
Dr. K. T. Ramesh  
Prof. Mayur Appaiah  
Dr. Chethana K. Y.  
Dr. Yatish Muddappa P. P.  
Prof. Shivakumar M. M.  
Prof. Santhosh S.

#### Address for Correspondence :

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