



Department Monthly Activity Reports

(Jan 2019 till Dec 2019)

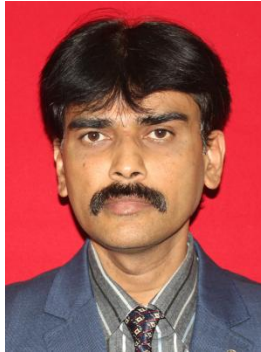
From

**Department of Industrial Engineering and
Management**

**B.M.S. COLLEGE OF ENGINEERING
BANGALORE - 560 019**

January 2019

1. Jan 10th: Dr. B. Ramesh Nayak takes charge as new HoD



Dr. B. Ramesh Nayak, Associate Professor, IEM Department has taken charge as the new HoD of IEM Department with effect from 10th January, 2019.

2. Jan 21 and 22nd: Participation in PES College Staff Tournament



At the PES College 3rd International Staff Tournament held on Jan 21st and 22nd, Dr. K.J. Ratharaj (Professor - IEM Department) and Shri Rupesh (Non-Teaching Staff) have represented B.M.S. College. In the Badminton Tournament (above 40 Years Category), the Team has secured the 2nd Place.

3. Jan 21st - 25th: FDP Organised by UVCE College, Bangalore



Dr. BR Ramji (Asst. Professor – IEM Department) has attended a one Week Faculty Development Program (FDP) titled “**Product Design and Innovation Workshop**” which was held at UVCE College, Bangalore from 21th to 25th Jan, 2019.

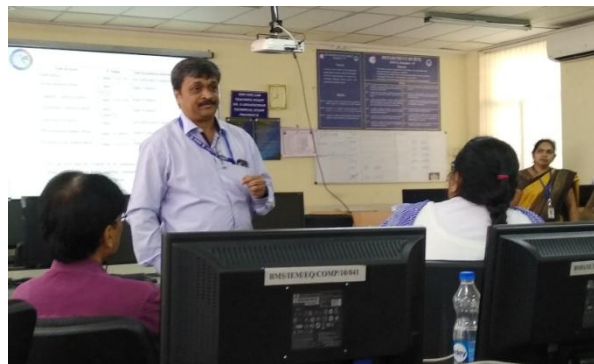
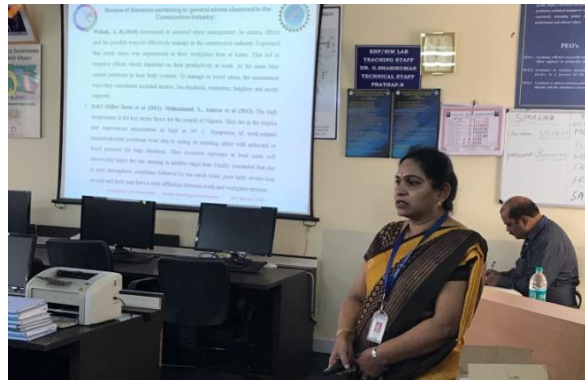
4. Jan 29th: Honorable Prime Minister Modi’s “Pariksha pe Charcha 2.0” address to all Students



The Department Faculty, students of 4th semester and 6th Semester IEM Department watched the live telecast of PM Modi’s “Pariksha pe Charcha 2.0” on 29th January, 2019. The Event was organized by MHRD, Govt. of India. The Prime Minister spoke about managing Exam Stress, use of Technology and realization of dreams by students, among other topics.

February 2019

1. Feb 3rd: PhD Thesis Defense of Professor V.N. Shailaja



Professor V.N. Shailaja, Asst. Professor, IEM Department conducted the defense of her PhD Thesis titled **“Gender Based Critical Study and Analysis of Ergonomic Stresses Developed in Manual Engineering Process”** on 3rd Feb, 2019 at the Simulation Lab of IEM Department. The Defense was attended by the HOD, Dr. B. Ramesh Nayak (Associate Professor), and all Faculty and Staff of the Department.

The HOD, Faculty and Staff of IEM Department congratulated Professor V.N. Shailaja for conducting the Thesis Defense.

The Guide for the Thesis, Dr. B. Ravishankar (Professor, IEM Department) was also present.

2. Feb 12-18th: Productivity Week of the National Productivity Council

The “Productivity Week” of the National Productivity Council was organized by IEM Department, with a theme of “Circular Economy for Productivity and Sustainability.”

Posters made by IEM Students reflecting the above theme were on display during this time.

The event was coordinated by Prof. V.N. Shailaja, Asst. Professor, IEM Department.



3. 16th Feb 2019: IEM Faculty Felicitated by IIIE, Bangalore Chapter





The Bangalore Chapter of the Indian Institute of Industrial Engineering (IIIE), under the Presidentship of Mr. Ashok Gopinath (MD, Accenture) and Chairmanship of Dr. B. Ravishankar (Professor, IEM – BMSCE) has organized a felicitation ceremony for the following IEM Faculty who has completed PhD / Ph.D. Thesis Defence.

i.) Dr. B. Ramesh Nayak (Associate Professor & HOD)

ii.) Prof. V.N. Shailaja (Asst. Professor)

4. 19th Feb 2019: CIM TOOLS Scholarship



The CIM Tools MOU has been renewed for 3 years on 13th Feb, 2019 and Scholarships issued for 4 meritorious students of IEM Department, which is based on criteria of “Means cum Merit and Performance”, was handed over to BMSCE by Mr. Srikanth and Mr. Umesh of CIM Tools Pvt. Ltd.

The Scholarship Cheques were awarded to the following students:

1. Mr. Prem Kumar A.- 5th Semester
2. Ms.Shreeraksha G S- 5th Semester
3. Ms. A. M Thanvi Thangamma- 3rd Semester
4. Ms. Kushi Soni - 3rd Semester

The scholarships were handed over by Dr. B. Ramesh Nayak, HOD - IEM Department, to the students in the presence of IEM Faculty and Staff.

5. Feb 26th: AICTE RPS – NDF Review Meeting



Dr. K.J. Rathanraj (Professor – IEM Department) has taken part in the RPS – NDF Review Meeting (Research Promotion Scheme under National Doctoral Fellowship) organized by the AICTE in Delhi on 26th of Feb, 2019.

6. Feb 27th: MOU with M/s. Direct Subzi, Bengaluru



A MoU (Memorandum of Understanding) has been signed on 26th Feb, 2019 between M/s. Direct Subzi, a startup company and BMSCE. The MoU was signed by Mr. Shashikanth Subramanya, Company Founder and Alumni of IEM Department and Dr. B.V. Ravishankar, Principal, BMSCE.

BMSCE was also represented by the HOD – IEM Department, Dr. B. Ramesh Nayak, Dr. K. J. Rathanraj (Professor – IEM Department) and Dr Indiramma M. (Head, Alumini – Industry Relations, BMSCE).

The Objectives of the MoU pertain to offering Student Internships at Direct Subzi.

7. Feb 2019: Paper Published in International Journal



A paper titled “**Concept Generation of Soybean Threshing Machine**” was published by Mr. A. Harsha (M.Tech Student) along with the Guide, **Prof. Mayur Appaiah** (Asst. Professor – IEM Department) in the International Journal of Research and Scientific Innovation (IJRSI), Vol. 6, Issue No. 2, Feb 2019.

March 2019

1. March 1st: Industrial Visit to M/s. National Aerospace Laboratories (NAL), Bangalore



Students of 4th SEM IEM department attended an Industrial Visit to M/s. National Aerospace Laboratories (NAL), Bangalore on 1st March, 2019. Accompanying them was **Prof. Prof. J. Shylaja** (Associate Professor – IEM), **Prof. Mayur Appaiah** (Asst. Professor – IEM) and **Shri Suresh** (IEM Staff). 56 students took part in the visit.

2. March 05th: TEQIP-III SLA Meeting



Dr. K.J. Rathanraj (Professor – IEM Department) has taken part in the TEQIP-III SLA Meeting (Student Learning Assessment) organized by the TEQIP-III on 5th of March, 2019 at New Delhi.

3. March 12th: Live interaction with VC & Registrar, VTU



A live interaction with VTU Vice Chancellor, **Dr. Karisiddappa** and VTU Registrar, **Dr. H. N. Jagannatha Reddy** was organized for all Deans and HODs of BMSCE at the College Faculty Development Center (FDC) Hall on 12th March, 2019. This meeting pertained to various initiatives undertaken by VTU, and was attended by **Dr. B. Ramesh Nayak** (Associate Professor & HOD, IEM).

4. March 15th-16th: TEQIP-III SLA Survey



Dr. K.J. Rathanraj (Professor – IEM Department) has taken part in the TEQIP-III SLA Survey (Student Learning Assessment) as a third party Proctor, held at BVB college of Engineering, Hubli on 15th and 16th of March, 2019.

5. March 20th – 21th: TEQIP Mentor Visit





TEQIP-III Mentor, **Dr. Yagyadutt S. Arya** visited BMSCE on 20th and 21st March, 2019. He interacted with IEM Faculty on 20th March - **Dr. KNP Prasad** (Associate Professor) and **Prof. Mayur Appaiah** (Asst. Professor) pertaining to the investments made at IEM Department for Laboratory Equipment, new facilities created, etc. He has also visited the IEM Department facilities and interacted with faculties including **Dr. B. Ramesh Nayak** (Associate Professor & HOD, IEM) and **Dr. K.J. Rathanraj** (Professor – IEM Department) during this time.

6. March 21th – 23rd: Workshop organized by IEM Department on “Japanese Management Techniques”:



A 3 day Workshop was organized by the IEM Department from 21st – 23rd March, 2019 for 6th Semester Students of IEM Department. The Workshop was on “Japanese Management Techniques”, and was organized under the leadership of the Chairman Convener, **Dr. B. Ramesh Nayak** (Associate Professor & HOD, IEM) in association with the Shingo Institute of Japanese Management (SIJM).

The Main Co-ordinator of the Workshop was **Prof. Kavita Rani N.** (Asst. Professor – IEM Department).

7. 28th-30th March 2019: Papers Presented in the International Conference on Recent Trends in Industrial Innovation, Value Engineering & Management Sciences – (ICIVMS-2019) organized by the Dayananda Sagar College of Engineering (DSCE), Bangalore

The papers presented are listed below.

A.



A paper titled “**Utilization of Value Engineering in Automobile Industry**” was presented by **Mayur Somashekar, Namratha Natraj, Nireesha Pairu and Srinica Hampi** (6th Sem IEM Students) was awarded “**Best Paper Award**” in Industrial innovation, Value engineering and Management sciences

B.



A paper titled “**Design of Energy Harnessing Speed Breaker**” was presented by **Dr. B. Ramesh Nayak** (Associate Professor & HOD, IEM), along with **Chiranth Bharadwaj, Pranava G. Bhujang and Rakshith R. Bharadwaj** (8th Sem IEM Students.)

C.



A paper titled “**Productivity Enhancement in Medium Scale Industry using Advanced Manufacturing Techniques**” was presented by **Prof. Reddy Naik J.** (Assistant Professor, IEM), along with **C.V.M. Malolan, Nakul Natarajan** and **Rajat Kini** (4th Sem IEM Students.)

D.

A paper titled “**Improving Supply Chain Surplus in a Textile Industry**” was presented by **Prof. Reddy Naik J.** (Assistant Professor, IEM), along with **Subham Dubey, Syed Ibrahim A** and **Tejaswin Shashi** (6th Sem IEM Students.)

E.

A paper titled “**Role of Supply Chain Management in Healthcare**” was presented by **Prof. Reddy Naik J.** (Assistant Professor, IEM), along with **Aishwarya S. Rao, Chandana V.** and **Pooja G.S.** (6th Sem IEM Students.)

F.



A paper titled “**OPTIMIZATION OF SAND CORES IN PEDESTAL BRACKET**” was presented by **Prof. Kavita Rani N.** (Assistant Professor, IEM), along with **Shivankar Mayur, Advaith V. S.** and **Shubham V.** (4th Sem IEM Students.)

G.



A paper titled “**OPTIMIZATION OF CASTING DESIGN**” was published by **Dr. B. Ramesh Nayak** (Associate Professor & HOD, IEM), **Prof. Mayur Appaiah** (Asst. Professor – IEM), **Khushi Soni** and **Maurya Krishna** (4th Sem IEM Students.)

April 2019

1. April 8th: Extension Lecture titled “High Temperature Composites for strategic Applications”



As part of the ongoing Extension Lecture Series at IEM Department, Lecture No. 72 was delivered by Mr. Udhay Kumar, Senior Principal Scientist (Scientist F), Materials Science Division, CSIR – National Aerospace Laboratories, Bangalore. The Topic of the lecture was “High Temperature Composites for strategic Applications”.

2. April 24-30th: Self Study Evaluation

As part of the curriculum, the IEM Department organized Self Study Evaluation (Comprehensive Course) for the following subjects:

4th Semester

i) Production Technology – II

(Course in Charge: **Prof. Mayur Appaiah**-Asst. Professor)

Self Study Evaluation took place on April 24-25th for all students of 4th Semester.

ii) Industrial Engineering

(Course in Charge: **Prof. J. Shylaja**-Associate Professor)

Self Study Evaluation took place on April 29-30th for all students of 4th Semester.

6th Semester

i) Simulation Modeling & Analysis

(Course in Charge: **Prof. Reddy J. Naik**-Asst. Professor)

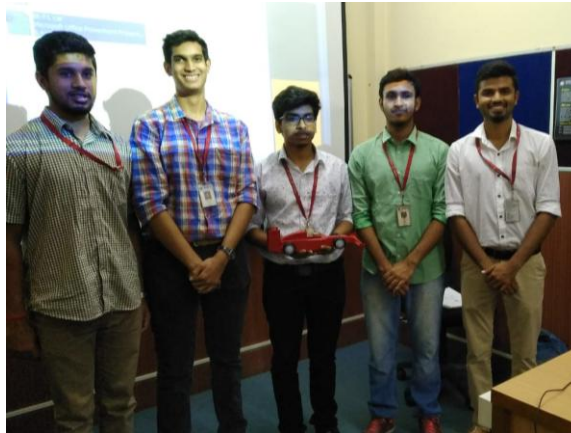
Self Study Evaluation took place on April 29th for all students of 6th Semester

ii) Supply Chain & Logistic Management

(Course in Charge: **Prof. Reddy J. Naik**-Asst. Professor)

Self Study Evaluation took place on April 30th for all students of 6th Semester

Some photos taken during the Self Study evaluation are shown below.



3. April 27th: INDEC Activity – 2019

The Industrial Engineering Club (INDEC) of IEM Department organized a get together for outgoing students of the 8th Semester on 27th April, 2019. The program was graced by the Principal, BMS College of Engineering, **Dr. B. V. Ravishankar** and organized under the leadership of the HOD, IEM Department, **Dr. B. Ramesh Nayak** (Associate Professor). The Faculty coordinator of the program was **Dr. VN Shailaja** (Asst. Professor – IEM Department).

The activities included games, group activities and a session where students spoke about their memories and experiences at BMSCE, humorous incidents, experiences with various teachers, about various subjects, etc.

This was followed by distribution of mementoes to all outgoing students and lunch organized by the department.





May 2019

1. 24th May: 8th SEM Project Exhibition

To encourage innovative and socially relevant projects of the 8th Sem Students, IEM Department had organized the “8th Sem Project Exhibition”. This was attended by the Vice Principal, BMSCE; **Dr. Ravishankar Deekshit**, along with all IEM Department faculties. The students participated in the Exhibition, and explained their work to the judges for the event – **Dr.H. Ramakrishna** (Professor and HOD – IEM Department, and Vice – Principal, DSCE) and **Dr. S V Satish** (Professor – ME Department, PES University, Electronics City Campus)

The Best Projects of IEM Department are as follows:

FIRST PLACE



TITLE: Design and Development of Medically Assisted System to Measure Infant Malnutrition.

STUDENTS: Apoorva B Patil, Archana Oram and Bhaavamaaya D Patil

GUIDE: Dr. B. Ravishankar (Professor – IEM Department)

SECOND PLACE



TITLE: Development of Multipurpose Student ID Card
STUDENTS: Navya Narayan Pai, Praveen Kumar B and Yashas Ranganath S
GUIDE: Dr. B. Ramesh Nayak (Associate Professor and HOD – IEM Department).

THIRD PLACE



TITLE: Design and Development of Economical Groundnut Pod Stripper
STUDENTS: Kiran S, Sanjana J S and Sithara V S
GUIDE: Dr. G. Shashikumar (Assistant Professor– IEM Department).

2. May 2019: Paper Published in International Journal of Management, IT and Engineering (IJMRA)



A paper titled “**Implementation of Six-Sigma DMAIC for Improvising the Process by Decreasing RPN Value**” was published by the following 8th Semester IEM Students along with **Dr. KNP Prasad** (Associate Professor – IEM):

1. S.D. Shreyas
2. Darshana N.
3. Prathiksha P.

June 2019

1. 18th June: Student Industry Projects with M/s. TVS Motors Ltd, Hosur

The IEM Department, BMSCE has collaborated with M/s. TVS Motors Ltd, Hosur, Tamilnadu to facilitate Student Projects, Internships, etc. Towards this, some of the students were allocated Projects and Internal Project guides during a meeting at TVS Motors, Hosur on 18th June, 2019. The details are as follows:



Project 1: Docking Digitization

Students: Nithin Rao, Harshavardan, PD Vijay

Guide (Value Stream Mapping - VSM): Mr. KJ Shashidhara, TVSM

Guide (BMSCE): Dr. G. Shashikumar - Asst. Professor - IEM

Mentor (TVS): Mr. G.J. Srinivasan

Mentor (BMSCE): Dr. K.J. Rathanraj - Professor - IEM

Project 2: Optimizing FG storage at 3W warehouse

Students: Aishwarya Rao, Chandana, Pooja G S

Guide (Value Stream Mapping - VSM): Mr. Vijendra Faria, TVSM

Guide (BMSCE): Dr. B Ravishankar - Professor - IEM

Mentor (TVS): Mr. G.J. Srinivasan

Mentor (BMSCE): Dr. K.J. Rathanraj - Professor - IEM

Project 3: Assembly line simulation/ line balancing

Students: Anusha G, Shreeraksha G S, Shraddha

Guide (Value Stream Mapping - VSM): Mr. C. Gandhi, TVSM

Guide (BMSCE): Dr. KNP Prasad -Associate Professor - IEM

Mentor (TVS): Mr. Vrushabha

Mentor (BMSCE): Dr. K.J. Rathanraj - Professor - IEM

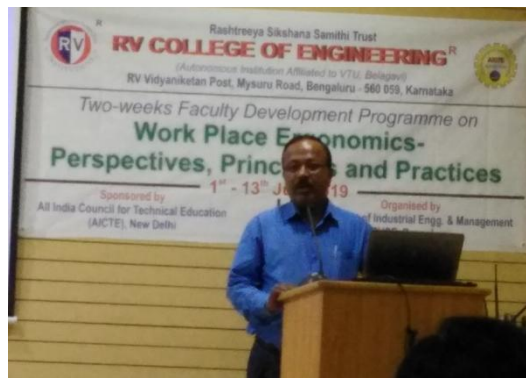
2. 26th June: C- Programming Language Course for IEM Department Students



The IEM Department, BMSCE has joined hands with the Department of Computer Science and Engineering, BMSCE to offer C-Language Courses to Students of IEM and allied branches. The Course has commenced on 26th June, 2019. This Course will go a long way to enable students to grasp basics of C-language and improve their Programming skills, employability, etc.

JULY 2019

1. July 1-13th: Two Week AICTE Sponsored FDP titled “Work Place Ergonomics - Perspectives Principles and Practices



A Two Week Faculty Development Program (FDP) was organized by the IEM Department , RVCE from 1th -13th July, 2019. The FDP was on “Work Place Ergonomics - Perspectives Principles and Practices.”

The FDP Program was attended by Prof. Reddy Naik, Dr. V.N. Shailaja and Prof. Mayur Appaiah (all Asst. Professors of IEM Department.)

An Industrial Visit to M/s. Lapp India Ltd., Bangalore was also by the participants undertaken as part of the FDP.

2. July 3rd: Session conducted at AICTE Sponsored FDP in RVCE - Bangalore



Dr. B. Ravishankar, Professor – IEM was the Speaker for an AICTE Sponsored FDP Session titled “Work Place Ergonomics - Perspectives Principles and Practices”. He has conducted a session titled” Ergonomics Assessment and evaluation”, which was at RVCE on 3rd July, 2019.

3. July 16th: Training Course on “Quality and Reliability Engineering” at BEML Bangalore



Dr. K.J. Ratharaj (Professor – IEM has conducted a Training Program for M/s. BEML, Bangalore on 16th July, 2019. The Training Topics given were “Control Charts for Variables” and “Control Charts for Attributes”.

4. July 18-19th: Visit undertaken to NIT, Trichy and PSG College, Coimbatore.





A Team from IEM Department comprising of Dr. K.J. Rathanraj (Professor – IEM), Prof . Kavita Rani N. and Prof. Mayur Appaiah (Both Asst. Professors) had undertaken a Visit to NIT, Trichy on 18th July and PSG College Coimbatore on 19th July, 2019, to see and understand the various Lab Equipments and Facilities of interest in these two colleges. Labs related to topics of Industrial Engineering, Production, Ergonomics, Robotics , etc. were visited by the team.

5. July 18-23rd: Value Added Course on Python Programming



The IEM Department, along with the Department of Computer Science and Engineering, BMSCE has offered value added course on Python Programming for students of IEM Department. The Program was conducted from 18th to 23rd July, 2019. The IEM Coordinator for the Program was Prof. Kavita Rani N (Asst. Professor).

AUG-DEC 2019

1. 3rd August: Orientation Programme conducted for -2nd year students of IEM Department.



Dr.B. Ravishankar, Dr. K.J. Ratharaj Professor- IEM , and Prof.Reddy Naik. J Asst. Professor – IEM addressed the 3rd semester students during orientation programme conducted in IEM department and gave the insights about the management aspect of technological areas at BE level and its scope in industries.

2. 3rd August: Invited as resource person



Dr.B. Ravishankar, Professor- IEM, invited as a resource person for the orientation programme conducted in Civil Engineering department, BMSCE, to address 3rd semester students about current trends and opportunities in civil engineering.

3. 5th August: 1st year students Inauguration of Induction programme for academic year 2019-20



Prof. K T Ramesh and Prof. MayurAppaiah, Assistant Professor-IEM, coordinated the 1st year students Inauguration of Induction programme for academic year 2019-20 from IEM Department.

4. 7th August: Refurbishing of FMS and CIM Laboratory Facilities.





Refurbishing of FMS and CIM laboratory facilities and demonstration of the new facilities was scheduled. Students and faculties of IEM were invited for demonstration.

5. 10th August: 2 week TEQIP-III sponsored FDP titled “Mechatronics and Artificial Intelligence”.



A two week FDP was organized by department of Mechanical Engineering, BMSCE from 29th July – 10th August 2019. The FDP was on “Mechatronics and Artificial Intelligence”. FDP was attended by Dr. KNP Prasad, Associate Professor-IEM and Dr. G Shashikumar, Assistant Professor-IEM.

6. 16th – 17th August: 1st year student Induction Programme at Departmental Level.



2 day student induction programme for 1st year students was organized under TEQIP, Phase-III by Department of Industrial Engineering & Management, B.M.S College of Engineering, on 16th and 17th August 2019. The programme aims to provide gist of Industrial Engineering & Management (IEM) branch and its opportunities in the current market situation.



Dr.KNP Prasad, Assoc. Professor and CAD/CAM Lab in charge briefing the gathering.

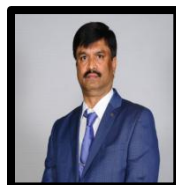


Mr. B S Ragheendra, CEO, KLB Engineering solutions and Bengaluru gave a talk on “Engineering analysis”



Dr. Sheeba Thomas, executive director of Glocon Training and Research Private Ltd. Gave a talk of “Carrier planning”, a short management game was conducted to the students so that what role they choose while planning their carrier after completion engineering degree.

7. 18th August: Annual Convention of quality circle forum of India



Dr. K.J. Rathanraj Professor- IEM, participated as a Jury member in Annual Convention of Quality Circle Forum of India- Bengaluru Chapter.

8. 23rd August: Extension Lecture titled “Solid Works”



As part of the ongoing lecture series at IEM department, Lecture No. 73 was delivered by Mr. Sunil Kumar-CAD designer, gave a talk on “Solid Works” software.

9. 23rd August: Interaction with TVS group about progress of student project.



Dr. B. Ramesh Nayak, Associate professor&HoD-IEM, Dr. K.J. Rathanraj IEM and Dr. KNP Prasad, Associate Professor-IEM with their project a video calling with TVS groups to inform about the progress of project in TVS Company.



Professor-students had taking place

10. 5th September: Extension Lecture titled “Job Opportunities for Industrial Engineers”.

As part of the ongoing lecture series at IEM department, Lecture No. 74 was delivered by Mr. Bharath Kumar, VST Tillers & Tractors, deliver a talk on “Job Opportunities for Industrial Engineers”.

11. 11th – 13th September: Invited as resource person



Dr.B. Ravishankar, Professor- IEM, invited as a resource person for discussion related to Industrial Engineering issues in the current scenario in IIT Guwahati.

12. 13th September: Extension Lecture titled “Wellness and Weight Management”.



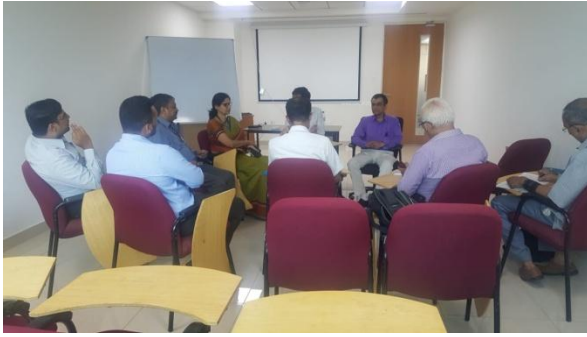
As part of the ongoing lecture series at IEM department, Lecture No. 75 was delivered by Mrs. Suma S Rajashekar, Wellness and Weight Management consultant, deliver a talk on “Wellness and Weight Management”.

13. 26th September: Extension Lecture titled “Maths in Action – Laplace Transformation in Engineering”.



As part of the ongoing lecture series at IEM department, Lecture No. 76 was delivered by Mr. B S Krishnamurthy, System Administrator, Defense accounts department deliver a talk on “Maths in Action – Laplace Transformation in Engineering”.

14. 26th September: Modality of the International Conference on Mainstream Block Chain Implementation.



Dr. B Ramesh Nayak, Associate Professor &HoD and Dr.B. Ravishankar, Professor- IEM invited to discuss the modalities for conducting International Conference on Mainstream Block Chain Implementation with Information Science Engineering department.

15. 30th September: Students Project Presentation with TVS motors company.



Final year students were offered to study the company issues and come out with solutions. Students worked upon the issues and came out the solutions and same was presented in front of the Vice President of the company along with Dr.K J Rathanraj, Professor- IEM

16. 30th September: Felicitation of faculties for their achievements



Dr. K N P Prasad, Professor- IEM honored for completing 25 years of dedicated service to the department.



Dr. B Ramesh Nayak, Associate Professor & HoD-IEM, got felicitated by the management for obtaining Doctorate degree from VTU.



Dr. V N Shailaja, Associate Professor- IEM, got felicitated by the management for obtaining Doctorate degree from VTU.

17. 11th October: Students industrial visit to Paramount Nutrition India Ltd, Bangalore



42 students from 5th semester and 30 students from 7th Semester IEM Students (total of 72 students) undertook an Industrial Visit to M/s. Paramount Nutrition India Ltd, Bangalore, on 11th October, 2019. The students were accompanied by Dr. K.J. Rathanraj (Professor – IEM) and Prof. Mayur Appaiah (Asst. Professor – IEM).

18. 8th and 9th November: Participated in Summit Connect sponsored by TEQIP-3



Dr. B Ramesh Nayak, Assc. Professor and Head of the department participated in “Summit Connect” jointly organized by SPIU-Uttar Pradesh and SPIU- Karnataka in associated with BMS College of Engineering and Dr. Ambedkar Institute of Technology,

19. 29th November: Student Scholarship in the department level.



Mr. Sachin Mulage (Diploma) from 3rd semester received “Vidwan B. Vishwanath Memorial” Means cum Merit Scholarship in the department of Industrial Engineering and Management.

Ms. Swapnapriya S.H. (1BM18IM055) from 3rd semester received “K M Veeranna Memorial” Means cum Merit Scholarship in the department of Industrial Engineering and management.

20. 12th – 14th December 2019: 5th International Conference on Industrial Engineering (ICIE-2019) & 61st National Convention of Indian Institution of Industrial Engineering.

Dr. B. Ravi Shankar published conference paper titled “Automation in internal Logistics: strategic and operational Challenges” in 5th International Conference on Industrial Engineering (ICIE-2019) & 61st National Convention of Indian Institution of Industrial Engineering at Sardar Vallabhbai National Institute of Technology, Surat.