

Dr. Ambedkar Institute of Technology, Bangalore- 56  
Department of Industrial Engineering and Technology

**BOS Minutes of meeting for AY 2021- 22.**

The Board of Studies meeting was held on 13/07/2021 at 10:00AM in IEM department laboratory through **Online Google Meet.** (Following COVID- 19 guidelines)

The BOS external members consist of subject experts from reputed institutions and industry personnel and also all the faculty members of Dept. of IEM.

Firstly, Dr. N Mohan, Prof. and Head, Dept. of IEM, Dr. AIT, welcomed all the external and internal BOS members for the meeting. HOD explained the scheme and syllabus to all the BOS members and parallelly for each subject the following were discussed and suggested.

The external BOS members suggested the following: *(As the scheme and syllabus for 2<sup>nd</sup> and 3<sup>rd</sup> year were finalized in the previous BoS meeting, and was suggested not to change for four years, this BoS meeting dealt with only 4<sup>th</sup> year scheme and syllabus)*


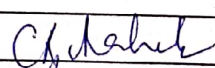

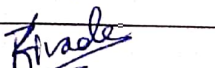
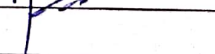
1. Supply Chain Management is asked to be followed by Operations Management. As this change could not be made, the members suggested implementing this for the next year.
2. For the subject Financial Management, the members suggested to add new reference book by Prasanna Chandra. They also asked us to add the topics- Adjustments and costing ratios in the second unit. This is implemented.
3. External BoS members asked us to map even the PSOs for all subjects.
4. It was suggested to omit the last chapter on Lean Manufacturing in Operations Management as the same topic is thought as a core subject. They asked unit 4 to be split and made unit 5. Decision support system topic was asked to be removed and to include Master Production scheduling. A reference book was suggested for this subject: Operations Management by Mahadevan. All the suggestions are implemented.
5. For Supply Chain Management, a book by Ravindran and Philip named Supply Chain Engineering was suggested for reference. They asked us to change to contents according to this text book for the next year.
6. For the subject Strategic Management, they asked us to include case studies referring from Harvard University.
7. For Statistics Laboratory, R Studio software was asked to introduce.
8. Mandatory Elective: Elements of Costing and Economics- external BoS members said that the syllabus for this subject is overloaded for 2 credits. They also asked if the credits can be increased to 3 credits. But as the credit system is fixed, this cannot be changed and proper discussion was made to reduce the syllabus as much as possible by the concerned Board.
9. Mandatory Elective: Occupational Safety and Health Administration- external BoS members asked us to include topics on HACCP. But this decision is to be made by Civil Board.
10. Project Management and Nanotechnology- the contents in the syllabus were asked to modify. This is changed and implemented.
11. Data Base Management System- new edition text books were asked to be included, which is done.



After a lengthy discussion and making a note of all the suggestions given by experts, the BOS members were thanked by Dr. N Mohan, Prof. and Head, Dept. of IEM, Dr. AIT.

HOD asked the external BOS members to give feedback and suggestion through mail also. The meeting ended with a heartfelt thanks to all the BOS members.

The following BOS members were present for the meeting:

Sl. No.	Name of BOS member	Designation	Signature
<b>External BOS Members</b>			
1	Dr. M Mathirajan	Professor, Management Studies, IISc, Bangalore.	Online
2	Dr. Praveen Gowda	Principal, G Made Gowda Institute of Technology, Mandya	Online
3	Dr. G S Prakash	Prof. & Head, Dept. of IEM, MSRIT, Bangalore	Online
4	Dr. Bhimsen Soragaon	Prof. & Head, Dept. of ME, JSSATE, Bangalore.	Online
5	Dr. Lakshminarasimhan	Prof., Dept. of IEM, SSIT, Tumkur.	Online
6	Mr. Preetham Hombal	Senior Supply Chain Professional, Capgemini, Bangalore.	Online
7	Mr. Vinodkumar Shivananda	Value Smart, Bangalore.	Online
8	Mr. Jagannath Kulkarni	AVP, HSBC, Bangalore.	
<b>Internal BOS Members</b>			
1	Dr. N Mohan	Prof. & Head, Dept. of IEM, Dr. AIT, Bangalore	
2	Dr. S K Rajendra	Associate Prof.	S.K. Rajendra
3	Dr. Rajeshwari P	Associate Prof.	
4	Dr. C R Mahesha	Assistant Prof.	
5	Mrs. Suprabha R	Assistant Prof.	
6	Mr. Chetan N	Assistant Prof.	
7	Mr. Rajesh K	Assistant Prof.	
8	Mrs. Sarvamangala S P	Assistant Prof.	



Dr. Ambedkar Institute of Technology, Bangalore- 56  
Department of Industrial Engineering and Technology  
**BOS Minutes of meeting for AY 2020- 21.**

The Board of Studies meeting was held on 18/08/2020 at 10:30AM in IEM department measurements laboratory through **Online Google Meet** (Following COVID- 19 guidelines)

The BOS external members consist of subject experts from reputed institutions and industry personnel and also all the faculty members of Dept. of IEM.

Firstly, Dr. G Rajendra, Prof. and Head, Dept. of IEM, Dr. AIT, welcomed all the external and internal BOS members for the meeting. HOD explained the scheme and syllabus to all the BOS members and parallelly for each subject the following for discussed and suggested.

The external BOS members suggested the following:

- The theory and practical must come in the same semester.
- There should not be more than 3 numerical subjects in each semester.
- The number of core subjects shall be restricted to 6 and 2 labs in each semester.
- Mathematics-4 and Statistics for Engineers, syllabus contents are repeated. Need to be discussed with Mathematics department.
- To add Dynamics of Machines in Theory of Machines.
- Add one module of advanced or contactless cutting or manufacturing process subject in 3<sup>rd</sup> semester.
- One module of contactless measurement in Measurements and Metrology subject.
- Add value engineering subject; include salvage and refurbishment topics in it.
- Python programming 18IML36: The syllabus is very CS centric. We need to move this more towards IE use. Maybe a chapter on data input, output, charts etc.
- Python Lab 18IML37: Better to run this in parallel with Statistics classes and in the lab get students to work on statistical analysis using Python.
- Computer Integrated manufacturing: Good curriculum but need to look into adding Robotic Process Automation as one chapter. There are quite a few tools in the market (UI path, Blueprism) who offer free demo versions to college and this can be included in the lab curriculum. This is a hot industry requirement.
- Order of subjects to be followed: first- OM, then FPD and later SCM.
- It was asked to reduce Operations Research syllabus content and to include networking unit in Project Management or Operations Management.
- In Data Warehousing and Mining- basics to be included, no need of architecture.
- For Supply Chain Management- Reference book- Ravi Ravindran.
- For Operations Management- Reference book- Mr. Mahadevan.
- In Advanced Operations Research, syllabus to be changed to Software driven program.
- To make DOE as core subject and SCM as elective.
- Very nice curriculum on Lean, Simulation and facilities planning. Please do not remove anything.
- Marketing management 18IM552: 4th Chapter can be digital marketing. Google SEO certification is free. Keep it as an assignment with 20 marks for students completing it. It has a lot of professional value and is covered in top MBA colleges.



- Operations Research 18IME01: 4th and 5th chapter can be replaced with cluster analysis (Hierarchical and K means). Very important tools today.
- Marketing Management:
  - The topics mentioned are for “Consumer Market”. Even the reference books are focused on consumer market (considering perfect market conditions which are never perfect).
  - The students (especially in Engineering) have to understand the concept of “Industrial Market” (B2B).
  - Industrial Marketing should be the focus. Reference books (Industrial Marketing):
    - “**Industrial Marketing**” by Krishana K Havaldar, Tata Mc-Graw-Hill
    - “**Industrial Marketing Strategy**” by Fedrick E. Webster, Wiley.
  - Note: We are introducing Marketing concepts to Industrial Engineers. Focus to be B2B (Business to Business).
- Project Management:
  - The students should be aware of the fundamentals they need to practice to become a Project Management Professional (PMP).
  - Maybe consider few lecture classes by professions from the Industry who are already PMP certified.
- A new subject was proposed to be introduced.
  - Product Management:
    - Product Management should be an Independent subject that merits an introduction, specifically as an elective during the VI or VII semester.
    - It would be a logical progression for the students who would have opted for Marketing Management during V semester.
    - Most of the Industrial Engineers pursue their career as Product Managers, rather than Project Managers.
    - It was strongly proposed introducing Product Management as a subject.
    - Reference books (Product Management): “Product Management in India” by Mr. Ramanuj Majumdar, IIM Kolkata, PHI Learning Private Limited.
    - “Product Management in Practice” by Matt LeMay, O’Reilly Media Inc.
- Introduction to “**Industrial Automation**” is also worth a consideration considering the on-going developments. These days, every Project & Industrial equipment’s are with “**Industrial Automation**”.
- To introduce Business Analytics as elective subject- ref. Introduction to Business Analytics by Dinesh Kumar, IIMB.
- It was asked to strengthen the software side in the syllabus.
- To introduce tool oriented subjects in electives and management related subjects one can learn online through MOOCs.
- Overall, it was asked to refer latest edition for all the subjects.
- To give guest lectures by Industry experts on Project Management.

After a lengthy discussion and making a note of all the suggestions given by experts, the BOS members were thanked by Dr. Rajeshwari P, Associate Prof., Dept. of IEM, Dr. AIT.

HOD asked the external BOS members to give feedback and suggestion through mail also. The meeting ended with a heartfelt thanks to all the BOS members.



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7	Mr. Vinodkumar Shivananda	Value Smart, Bangalore.	online
8	Mr. Jagannath Kulkarni	AVP, HSBC, Bangalore.	online
9	Mr. Anil Kumar SNG	Manager, TCS, Bangalore.	online.
<b>Internal BOS Members</b>			
1	Dr. G Rajendra	Prof. & Head, Dept. of IEM, Dr. AIT, Bangalore	G Rajendra
2	Dr. N Mohan	Professor	N Mohan
3	Dr. S K Rajendra	Associate Prof.	S.K. Rajendra
4	Dr. Rajeshwari P	Associate Prof.	Rajeshwari P
5	Dr. C R Mahesha	Assistant Prof.	C R Mahesha
6	Mrs. Suprabha R	Assistant Prof.	Suprabha R
7	Mr. Chetan N	Assistant Prof.	Chetan N



# BOS meeting for the academic year 2019-20

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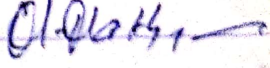
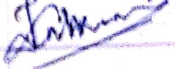

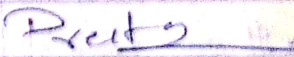
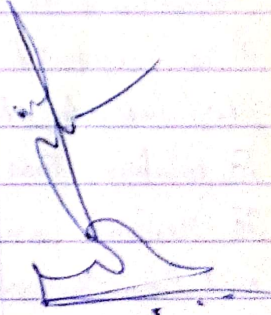

BOS meeting held on 31-05-2019 at 10.00 am  
in the department of IEM.

## Agenda :

- 1) Approval of Curricular design for the academic year 2019-20
- 2) Approval of Scheme for III to VIII Semestr (BE) for the academic year 2019-20.


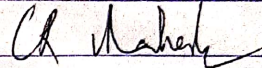
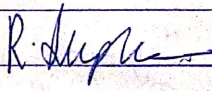
Sl No	Name of the BOS members	Designation and Address	Signature
1	Dr. G. Rajendra Chairman	prof and Head Dept. of IEM.	G.rajendra 31/5/19
2	Dr. Prakash G.S VTU Nominee	prof and Head MSRIT, Bangalore.	G.S-Prakash 31/05/19
3	Dr. Praveen Gowda Member External.	professor, principal DOxford College of Engg	Praveen Gowda
4	Dr. Blomseen Soragan Member. External.	prof and Head Dept. of Mech. Engg JSSATE, Bangalore	Blomseen Soragan 31-5-19



Sl No	Name of the BOS Members	Designation and Address	Signature
5	Dr. S.N. Lakshminarayana <del>Dr. Lakshmi Narayan</del> Member, External.	Prof. and Head Dept of IEM, SSIT, Tumkur.	
7	Dr. M. Muthirajan	Professor, Management Studies. IISe, Bangalore	
8	Jaganath Mr. Jaganath Kulkarni Industry Representative.	AVP. HSBC, Bangalore.	
9	Mr. Anil Kumar Saig Alumni Representative	Manager, TCS Bangalore.	
10	Ms. Preetam Hombal Industry representative	CAPEGEMINI, Bangalore	
11	Mr. Vinod Kumar Shivamanda Industry representative.	Value Smart, Bangalore.	
12	Dr. N. Mohan	Professor - Dept of IEM.	
13	Dr. S.K. Rajendra	Associate Professor.	S.K. Rajendra

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Sl No	Name of the BOE members	Designation and Address	Signature
14	Dr. Rajeshwari P	Associate professor.	
15	Dr. C.R. Mahesha	Assistant professor.	
16	Smt. Suprabha R	Assistant professor.	
17	Mr. N. Chetan	Assistant professor.	Absent

The BOE meeting was held on 31/05/2019 at 10:00am in the department of IEM. along with Industry experts, other college faculties, university professors and BOE members of our department. Initially HOD welcomed all the Professors and Industry experts for the meeting.

The following are the inputs given by the experts:

- It was suggested to name the subject title same as the text book subject.

Ex: Sub Title: Work Study and Ergonomics, Ref Book: Work study & Ergonomics

- Mathematics to be changed to Engineering Mathematics,
- It was suggested to introduce a programming language like C++/R/PYTHON in 3<sup>rd</sup> Sem.
- To include 'R' in Statistics lab.
- To combine TOM and DME and to rename it as Mechanical & Design Elements.
- To rename and change the contents of Statistics for Engineers as Descriptive and Predictive Analytics for Engineers [Ref. Book: Prof. Dinesh Kumar] M<sup>ty</sup> Stats Lab.
- Prerequisite for OM: Material Mgmt → Facility Planning & Design → Lean Mfg
- CIM to be introduced in 1<sup>st</sup> Sem and CIM lab in 5<sup>th</sup> Sem.
- Rename Engg Economy as Engg Economics and to stress more on Economics, Macro Economics - GDP, GNP, National Income etc.
- OR to be renamed as Prescriptive Analytics, to remove scheduling and to include Non linear Tool, To remove 5<sup>th</sup> unit and to elaborate existing units. More emphasis to be given to Meta heuristics and on formulation and what-if analysis.
- Replace Advanced Manufacturing process with some other. Operational Emergence Core



\* The subjects MP-1 & MP-2 shall be treated as one subject as manufacturing Technology for III semester. 2018 Baren onwards for the academic year 2019-20 37

- OR lab to be introduced software such as LINGO/<sup>LINGO/</sup>LINDO etc.
- Mini Project: Students to be given an clear information about what we expect from their projects.
- Supply Chain Management - Ref: Ravi Ravindran "Supply Chain Engg". make it core<sup>subject</sup>.
- ERP Lab to be renamed and changed accordingly as Operations Mgmt Lab.
- Suggestion for Technical Seminars: Ref. IEEE or any reputed journal paper, read the literature, work on it, and then present.
- Industrial Engg - Refer Work Study and Ergonomics - Groover and ILO latest edition.
- In syllabus, change the edition of all text books and reference books to latest one.
- Industry 4.0 to be introduced as an unit in subject like OM.
- To introduce a software for IE lab.
- PERT/CPM to be introduced in OM or PM.
- Advance OR can be given as an elective.
- Sustainability Business Practices to be introduced as core subject as an unit in Advanced Industrial Engineering or Supply chain with case studies for the same.
- It was also suggested to have 2 students per group for Project work.
- Industry experts also said that they look in a candidate these things during interview.
  - Understanding the basic concepts
  - Awareness towards latest industry trends
  - Attitude
  - Ability to learn new technology, domain etc
- Special Discussion: Student named Sampath Kumar YJ (IDAIBIMOU1) had missed most important core subject Industrial Engineering during his academics due to year back and changes in subject and subject code w.r.t BOS, Therefore, it was suggested to consider Concepts of Management as an Audid subject and to give the student IE as core subject for which he has to attend write the SEE exam along with IE laboratory.

The meeting was concluded with a vote of thanks by Dr. N. Mohan.

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subject.



## Internal BOS members

- 1) Dr. G. Rajindran, Hon — G.R.
- 2) Dr. M. Mohan — ~~M.M.~~
- 3) Dr. S.K. Rajindran — S.K. Rajindran
- 4) Dr. Rajeshwari P — Rajeshwari P
- 5) Dr. C.R. Mahesh —
- 6) Suprabha - R — R. Suprabha
- 7) Chetan N —
- 8) ~~S. Ram~~



1) Dr. Prakash G. S — h-s- prakash

2) Dr. Praveen Gowda — ABSENT.

3) Dr. Bhimsen Soragan — ~~Praveen~~ 31-5-19

Dr. S.N. Lakshminarasimhan

4) Dr. Lakshmi Narayana —

5) Dr. M. Mallirajan —

Jaganath

6) Mr. Jagannath Kulkarni —

7) Mr. Preetam Hombel —

Praveen

8) Mr. Vinod Kumar Shirananda —

9) Mr. Anil Kumar SNG —

ABSENT.

10) Dr. G. RAJENDRA

HOD

G.K.



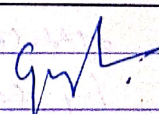
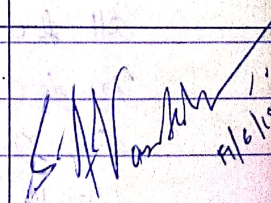
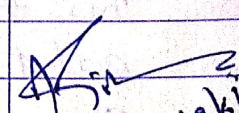
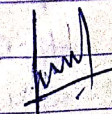
# BOS Minutes of meeting for AY-2018-19.

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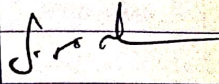

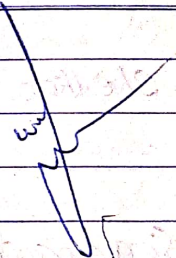
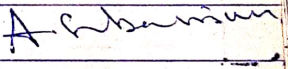
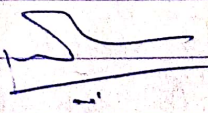
BOS meeting held on 19-06-2018 at 10:00 am in the department of IEM.

## Agenda:

- 1) Approval of Curricular design for the academic year 2018-19.
- 2) Approval of Scheme for III to VIII Semester (BE) for the academic year 2018-19
- 3) Approval of new Syllabus

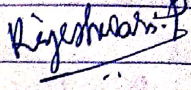
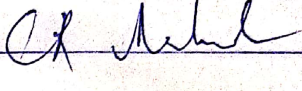
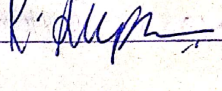
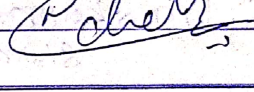
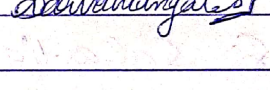
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1)	Dr. Rajendra Chairman	prof. and Head Dept. of IEM.	
2	Dr. Vasanth Kumar Member (External)	Professor DSCE, Bangalore	 19/6/18
3	Dr. Rajaprakash B.M Member, (External)	prof and <del>head</del> Dept. of mech. Engg URCE, Bangalore	 19/6/2018
4	Dr. R. Prakash VTU, Namphree	prof and head Dept. of IEM SSIT, Tumkur.	



Sl No	Name of the BOD members	Designation and Address	Signature
5	Dr. Devadasan. S R Member (External)	Professor. Production Engineering PSGCT, Coimbatore - T.N.	
6	Dr. Nagendra Gupta Member (External) <sup>Chk</sup>	Professor. RVCE, Bangalore.	
7	Mr. Vinodkumar Shivananda Industry representative	Director. VSMS, Bangalore	
8	Mr. Sebastian A Alumni representative	Chief Manager Continental Automatic Components Pvt. Ltd. Bangalore.	
9	Mr. Jagannath Kulkarni Industry representative	AVP, HSBE Bangalore.	AB
10	Dr. N. Mohan	Professor. Dept of IEM	
11	Dr. S.K. Rajendra	Associate professor.	S.K. Rajendra

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12	Dr. Rajeshwari P	Associate professor Dept. of EEM	
13	Dr. C.R. Mahesha	Asst. prof. Dept. of EEM	
14	Suprabha .R	Asst. prof. Dept. of EEM	
15	Chetkan N.	Asst. prof. Dept. of EEM	
16	Saranangala -SP	Asst. prof. Dept. of EEM	

The BOS meeting was held on 19/6/18 in college premises along with Industry experts, other college faculties, other university faculties and faculties of our department. Initially HOD welcomed all the dignitaries for the BOS meeting. The following are the inputs given by the experts.

- Number of hours/contact hours/week to be added in the scheme of the syllabus.
- For "Fluid mechanics", tutorial classes could be added.
- In syllabus, mapping to be done along with POs also.
- For subjects, other than Text books and reference books, MOOCs, NPTEL, SWAYAM etc. such links to be provided.
- In syllabus: Spelling mistakes are to be corrected, Text book names to be given with full details [Publisher name, year, edition etc.]
- For Engineering Thermodynamics, Text books to be included. and for Manufacturing Process - I, add reference books and handbooks.
- For Labs like, Foundry & forging, Material testing, Industrial Visits to various relevant industries names can be mentioned in the syllabus copy itself.
- A proposal was given to include experiments on Ergonomics in Industrial Engg Lab and also it was proposed to have a tieup with any hospital for the same.



- Experts also asked us to include some concepts on CMM and digital metrology in Engineering Measurements and Metrology subject. along with concepts on Vision measurement (VMM)
- For Theory of Machines, reference books to be included: Thomas Bevan
- For Machine Shop it was proposed to include assembly and disassembly of parts
- There was a discussion on combining Fluid Mechanics and machinery or at least to include some concepts on Pelton wheel in FM theory.
- It was asked to include GD&T in CAMD.
- It was also proposed that IEM department should handle subject like Management & Entrepreneurship (at least frame the syllabus)
- In Engineering Economy - eBID/EBidit concepts to be adapted.
- In the subject Facilities Planning and Design, credits has to increase and students are to be given activities related to Layout Drawing and also for UNIT 3: number <sup>contact</sup> hours to be increased. It was also discussed that if possible topics on Value stream mapping to be included in Industrial Engineering before FPD.
- A course on Additive Manufacturing to be included.
- In subject Tool Design Engineering, topic on Die Inserts to be included giving focus on the 'inserts' wear and tear.
- Advance Material Processing: Hybrid processing to be included. Altogether the subject's syllabus content was asked to be reviewed.
- In Marketing Management, last unit ~~was~~ is to reviewed
- There was a proposal to change the Mechanical Engineering Lab as Energy Conversion Lab and to change Statistics Lab as Data Analytics Lab.
- Subject title of Material Management was asked to be changed to Inventory management.
- In Organization Behaviour topic on Psychometry / Psychograph to be included. Also a topic Competitive Intelligence could be included or can be given as topic for seminar in OB or HRM.
- In Maintenance and Safety Engineering, it was asked to include a demo class on fire extinguishers.
- For Operations Research refer: J.K. Sharma, Kanthi Sivaroop and included topic on Transshipment.



- It was also discussed to give importance on IoT: Internet of Things in the syllabus.
- Supply Chain Management: Syllabus was asked to be changed according to Simchi-Levi book on SCM.
- In Operations Management, it was proposed to include topic on Services Operation.
- Financial Management & Accounting: Topic to be changed to either Financial Accounting & Management or Simply Financial Management. Also the arrangement of units in the subject is asked to be changed.
- In Lean Manufacturing: Harvard case studies to be included, HP case studies too and for problems (numericals) refer Taiichi. Include Warehouse Management and also refer to Pascal, Dennis book on Lean.
- In T&M, remove Reliability topic and add Six Sigma, change the units and include the topic Certification Process: Refer: Besterfield book.
- In Human Resource Management, unit 2 should include Competitive Management with case studies.
- In Strategic Management include Product Life Cycle Management topic.
- For Technology Management refer Betz and rework on syllabus content.
- For Just In Time Manufacturing add more reference books.

All Experts discussed about the new syllabus scheme and following are their inputs.


- \* Materials Management can be Supply Chain management on the whole.
- \* It was asked to look upon the coding system of subjects.
- \* It was asked to make Supply Chain Management as a core subject.
- \* Few electives were asked to be introduced especially Data Analytics and Industry 4.0.
- \* MAT Laboratory was asked to include in the syllabus.
- \* In Project Management it was asked to stress on topic related to Planning and Scheduling.
- \* Elective subject Rapid Prototyping title to be changed to Additive Manufacturing.

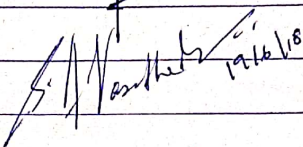
With these inputs the BOS meeting was concluded. A vote of thanks given by Dr. N. Mohan. Finally, HOD thanked everyone.

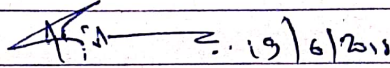
⊗ MOST IMPORTANTLY, ALL THE MEMBERS OF BOS ASKED TO REDUCE THE 8<sup>th</sup> SEM CREDITS AND TO PUT THOSE CREDITS IN LOWER SEMESTER.

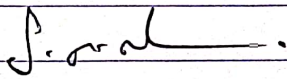



⊗ It was discussed in the meeting that for some <sup>students</sup> Concepts of Management could be prepared as Audit Course and in place of it, Industrial Engineering can be ~~replaced~~ taken as main course [due to changes in syllabus after BOS meetings and students failing a year].


1) Dr. J. Prakash → 

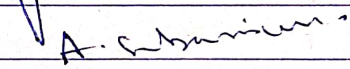
2) Dr. Vasanth Kumar → 

3) Dr. Rajmukesh B.M. → 

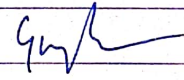
4) Dr. Devadaman S.R. → 

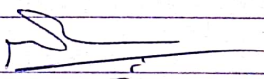
5) Dr. Nagesh Gupta → 

6) Dr. Vinod Kumar Shivanand → 

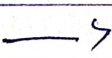
7) Dr. Sebastian A → 

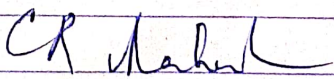
8) Dr. Jagannath Kulkarni → AB

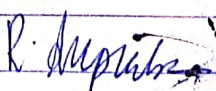
9) Dr. Rajendra G. → 

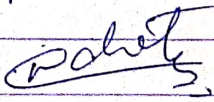
10) Dr. N. Mohan → 

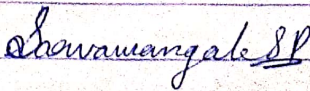
11) Dr. S.K. Rajendra → S.K. Rajendra

12) Dr. Rajeshwari P → 

13) Dr. C.R. Mahesha → 

14) Suprabha R → 

15) Chetan N → 

16) Sarvamangala S.P → 

Gold



# BOS Minutes of meeting for AY-2017-18

6

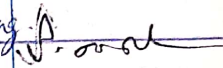

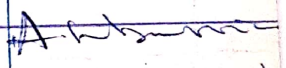
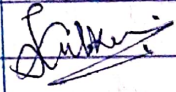
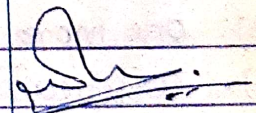
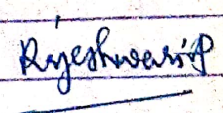
BOS meeting held on 27-03-2017 at 10:00 am in the department of IEM.

## Agenda:

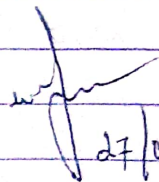
- | S.No | Name of           |
|------|-------------------|
| 5    | Dr. Nagesh Member |
| 6    | Dr. D. Member     |
| 7    | Chend Indust      |
| 8    | Sabc Alum         |
- Approval of Curriculam design for the academic year 2017-18.
  - Approval of Scheme for III to VIII Sem BE (IEM) for the academic year 2017-18.
  - Approval of Syllabus for III to VIII Sem BE (IEM) for the academic year 2017-18.

S.No	Name of the members	Address	Signature
1	Dr. G. Rajendra Chairman	prof and Head Chairman, BOS	
2	<del>Dr. K. V. Venkatesh Babu</del> Principal <del>Principal, DCE, Bangalore</del>	Principal DCE, Bangalore	
3	Dr. Varant Kumar member (External)	professor DCE, Bangalore	
4	Dr. Rajprakash member (External)	professor & Head Dept. of Mech. Engg. UVCE, Bangalore.	



Sno	Name of the member	Address	Signature
5	Dr. Nagendra Gupta Member (External)	professor RVCE, Bangalore	
6	Dr. Devadasan Member (External)	professor, production Engineering PSGCT Coimbatore Etamam Tamilnadu	 mark 25/2/17
7	Chendrasekhar patil Industry representative.	Manager - Engineering & CI Lm wind power, Bangalore	
8	Sabastian A Alumni representative	<del>Chief</del> Chief manager Continal Automotive Components Pvt. Ltd	 A. SEBASTIAN
9	Jaganmoh Rulkani Alumni Representative	AVP. HSBC. Bangalore.	
10	Dr. N. Mohan	professor Dept of IEM. Dr. DSI	
11	S. K. Rajendra	Assoc. prof. Dept. of IEM	S. K. Rajendra
12	Rajeswari P	Asst. prof., Dept. of IEM.	
13	Dr. C. R. Mahesha	Asst. prof., Dept. of IEM.	CR Mahesh
	Gold		



S.No	Name of the member	Address	Signature	*
14	Suprabha R	Asst. Professor. Dept. of I.T. Dr. AIT	R. M. P.	9)
15	Chetan N	Assistant Professor IEM Dept, Dr. AIT Bangalore - 56	Chetan 27/3/17.	10) 11)
16	VINOD KUMAR S	DIRECTOR, VALUE SMART <sub>2</sub> MANAGEMENT SERVICES PVT LTD, BANGALORE - 560078	 27/03/2017	12) 13) 14) 15)
The BOS meeting was held on 27.03.2017, HOD welcomed all the members from industry, dept faculty, alumni, and a faculty from other university.				16)

- 1). IMSI Engg, Economy: - title to be changed to Engg, Economics
  - 2). one more IDE in the 7<sup>th</sup> sem i.e Project Management.
  - 3). certification course as internship at 5<sup>th</sup> or 6<sup>th</sup> sem (PMP) (Mr. Sebastian A suggested - Project Management Professional)
  - 4). change/swap MIS in V sem and DBMS in VIII sem.
  - 5). change title Indl; Engg; (IMSI) as work study - not required.
- after discussion, it was convinced to retain the same title.
- 6). In Engg Metrology and Measurements, introduce the chapter "Digital metrology" as latest addition to the subject.
  - 7). Do not use software names (links) instead use - suitable software (because it markets its company name through institutions)
  - 8). text books and reference books specifications should be complete in all sense in the syllabi book.
- \*. For OR case studies should be included.



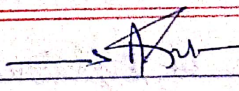
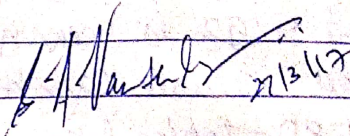
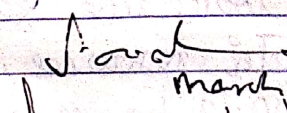
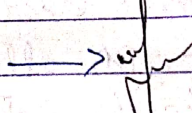
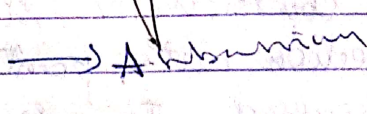
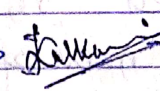

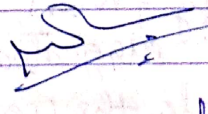
\* put Knowledge management instead Techy, mgt. <sup>Int</sup> book - Taiwan.

\* conduct finishing schools on : Labels & Nomenclatures, standards on European vs Indian industry, Japanese std, Ergonomics etc.

\* introduce Operations risk in OM (IM72)

- 9). In the scheme of syllabus there is mistake. They are IM72 and IM52 is been named as FPD & OM. change it
- 10) Guest lectures can be conducted by civil Engrg, professors on FPD-topics like "zones of industries, green technology, and water resources, its treatment etc.
- 11). FPD should be more elaborated with labory if possible or as an assignment on allowances, types of flows in the plant layout with standards provided.
- 12). in connection with point (11) Process layout drawing was discussed to re-implement if possible.
- 13). change the name of the topic in (IM45 MOM) as design of gear box instead of spur gear problems.
- 14) Include contingency / cross table test in IM54 SE.
- 15) In Advanced Mfg process (Dr. NM) check Tec books and reference books suggested
- 16). stress / elaborate the concept of industrial market and consumer market in Marketing Management subject. And ~~also~~ also include Advertisement and Publicity topic in the syllabus.
- 17). check the chapter contents in unit-4. in Value Engrg.
- 18). Include Block chains as new topic if possible in DBMS.
- 19). change the title of Statistics lab to data analytics lab if it can be incorporated in VII or VIII sem, if possible.
- 20). instead of ISO, use BIS of BVQI 2016 stds in QAR (IM62) it was conviced to ISO only as it covers all the stds till date.
- 21). For the subject OB ask industry guides to assess the team while they are doing projects based on OB, can also introduce synchronisation as new topic for assessing.
- 22). In ME&S suggest one text book on safety exclusively
- 23). include VSM, lean mfg, tools in lean mfg (elective) and the suggested text book is Deming's parial, Toyota feed book
- 24) For DOE add one more text book - Dr. S. Krishnalah
- 25) In TQM, unit-4 remove repetitive topics.
- 26) Industrial <sup>Gold</sup> Relations in BE - introduce this as a chapter or part.



- 17 Dr. Rajprakash B.M. →  27/3/2017
- 27 Dr. Valant Kumar. A. →  27/3/17
- 37 Dr. Devadasan S.R. →  March 27, 2017
- 47 Sri Vinod Kumar. S →  27/03/2017
- 57 Sri Sebastian. A →  A. Sebastian 27/3/2017
- 67 Sri Jagannath Kulkarni →  27/03/2017
- 77 Sri Chandrasekhar Patil →  27/3/2017
- 87 Dr. N. Mahan → 
- 97 S. K. Rajendra → S. K. Rajendra
- 107 P. Rajeshwari → Rajeshwari P
- 117 Dr. E. R. Mahesh → CR Mahesh
- 127 Suprabha R. → R. Suprabha
- 137 Chetan S → Chetan S
- 147 Rajesh K → Rajesh K



**Dr. Ambedkar Institute of Technology, Bengaluru-560056**  
**Outcome Based Education (OBE) and Choice Based Credit System (CBCS) (As per NEP 2020)**  
**Scheme of Teaching and Examination for I Semester B.E., (Common to all B.E. Programmes) Academic Year:2021-22**

Chemistry Cycle: I Semester														
Sl. No.	Course Category	Course Code	Course Title	Teaching Department	Teaching Hrs/Week			Examination			Credits			
					L	T	P	Duration (Hrs)	CIE Marks	SEE Marks		Total Marks		
1	BS	21MAT101	Calculus and Differential Equations	Mathematics	3	2	0	0	5	3	50	50	100	4
2	BS	21CHT102	Engineering Chemistry	Chemistry	3	0	0	0	3	3	50	50	100	3
3	ES	21CST103	Problem solving through Programming	Computer Science	2	2	0	0	4	3	50	50	100	3
4	ES	21ECT104	Basic Electronics and Communication Engineering	Electronics	2	2	0	0	4	3	50	50	100	3
5	ES	21MET105	Elements of Mechanical Engineering	Mechanical	2	0	2	0	4	3	50	50	100	3
6	BS	21CHL106	Engineering Chemistry Laboratory	Chemistry	0	0	2	0	2	3	50	50	100	1
7	ES	21CSL107	Computer Programming Laboratory	Computer Science	0	0	2	0	2	3	50	50	100	1
8	HS	21HST108	Communicative English	Humanities	1	0	1	*0	2	2	50	50	100	1
9	AE	21CVT109	Rural Development Engineering	Civil	1	0	1	*0	2	2	50	50	100	1
10	MC	21HSN110	Career Development skill-I	Humanities	1	0	1	*0	2	----	50	--	PP/NP	0
Total									30		500	450	900	20

Note: BS: Basic Science Course, ES: Engineering Science Course, HS: Humanities & Social Science Course,

AE: Ability Enhancement Course, MC: Mandatory Course, \* No practical evaluation,

L: Lecture, T:Tutorial, P:Practical/drawing, S:Self study, CIE: Continuous Internal Evaluation, SEE: Semester End Examination



**Dr. Ambedkar Institute of Technology, Bengaluru-560056**

**Outcome Based Education (OBE) and Choice Based Credit System (CBCS) (As per NEP 2020)**

**Scheme of Teaching and Examination for II Semester B.E., (Common to all B.E. Programmes) Academic Year:2021-22**

**Physics Cycle: II Semester**

Sl. No.	Course Category	Course Code	Course Title	Teaching Department	Teaching Hrs/Week			Examination			Credits			
					L	T	P	SEE Marks	CIE Marks	SEE Total Marks				
1	BS	21MAT201	Advanced Calculus and Numerical Methods	Mathematics	3	2	0	0	5	3	50	50	100	4
2	BS	21CHT202	Engineering Chemistry	Chemistry	3	0	0	0	3	3	50	50	100	3
3	ES	21CST203	Problem solving through Programming	Computer Science	2	2	0	0	4	3	50	50	100	3
4	ES	21ECT204	Basic Electronics and Communication Engineering	Electronics	2	2	0	0	4	3	50	50	100	3
5	ES	21MET205	Elements of Mechanical Engineering	Mechanical	2	0	2	0	4	3	50	50	100	3
6	BS	21CHL206	Engineering Chemistry Laboratory	Chemistry	0	0	2	0	2	3	50	50	100	1
7	ES	21CSL207	Computer Programming Laboratory	Computer Science	0	0	2	0	2	3	50	50	100	1
8	HS	21HST208	Professional writing skills in English		1	0	1	0	2	2	50	50	100	1
9	AE	21CVT209	Rural Development Engineering	Civil	1	0	1	0	2	2	50	50	100	1
10	MC	21HSN210	Career Development skill-II	Humanities	1	0	1	0	2	----	50	--	PP/NP	0
					<b>Total</b>			<b>30</b>			<b>500</b>	<b>450</b>	<b>900</b>	<b>20</b>

Note: BS: Basic Science Course, ES: Engineering Science Course, HS: Humanities & Social Science Course,

AE: Ability Enhancement Course, MC: Mandatory Course, \* No practical evaluation,

L: Lecture, T:Tutorial, P:Practical/drawing, S:Self study, CIE: Continuous Internal Evaluation, SEE: Semester End Examination



III SEMESTER												
Sl. No	Course and Course Code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	BC	18MA31	Transforms and Boundary Value Problems	Mathematics	2	2	--	03	50	50	100	3
2	PC	18IM31	Mechanical Measurements and Metrology		3	0	--	03	50	50	100	3
3	PC	18IM32	Material Science and Metallurgy		3	0	--	03	50	50	100	3
4	PC	18IM33	Thermal and Fluids Engineering		3	2	--	03	50	50	100	4
5	PC	18IM34	Manufacturing Technology		3	0	--	03	50	50	100	3
6	PC	18IM35	Mechanics of Materials		3	0	--	03	50	50	100	3
7	PC	18IM36	PYTHON Programming		2	0	--	02	50	50	100	2
8	PC	18IML37	PYTHON Programming Laboratory		--	---	2	03	50	50	100	1
9	PC	18IML39	Manufacturing Technology Laboratory		--	---	2	03	50	50	100	1
10	HS	18HS31/32	Constitution of India Professional Ethics and Human Rights/ / Env. Studies	HS/ CV	1	--	--	02	50	50	100	1
11	MC	18HS33	Soft skills (MC)	Humanities	04	-	--	03	50	-	50	0
<b>TOTAL</b>					<b>19</b>	<b>04</b>	<b>06</b>	<b>34</b>	<b>550</b>	<b>550</b>	<b>1100</b>	<b>24</b>
<b>Course prescribed to lateral entry Diploma holders admitted to III semester of Engineering programs</b>												
12	MC	18MAD31	Basic Engg. Mathematics - I	Mathematics	02	01	--	03	50		50	0
<b>Note: BC: Science Course, PC: Professional Core. HS: Humanities, MC: Mandatory Course.</b>												



**IV SEMESTER**

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination			Credits	
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks		Total Marks
					L	T	P					
1	BC	18MA41	Numerical Methods & Applied Statistics	Mathematics	2	2	--	03	50	50	100	3
2	PC	18IM41	Work-study and Ergonomics		4	0	--	03	50	50	100	4
3	PC	18IM42	Theory of Machines		2	2	--	03	50	50	100	3
4	PC	18IM43	Engineering Economy		2	2	--	03	50	50	100	3
5	PC	18IM44	Statistics for Engineers		4	0	--	03	50	50	100	4
6	PC	18IM45	CAMD		3	0	--	03	50	50	100	3
7	PC	18IML46	Work-study and Ergonomics Laboratory		--		2	03	50	50	100	1
8	PC	18IML47	Mechanical Measurements and Metrology Laboratory		--	---	2	03	50	50	100	1
9	PC	18IML48	Material Testing Laboratory		--		2	03	50	50	100	1
10	HS	18HS41/42	Constitution of India Professional Ethics and Human Rights/ Env. Studies	HS/ CV	1	--	--	02	50	50	100	1
11	MC	18HS43	Employability skills (MC)	Humanities	04	-	--	03	50	-	50	0
<b>TOTAL</b>					<b>19</b>	<b>06</b>	<b>04</b>	<b>26</b>	<b>450</b>	<b>450</b>	<b>900</b>	<b>24</b>
<b>Course prescribed to lateral entry Diploma holders admitted to III semester of Engineering programs</b>												
12	MC	18MAD41	Basic Engg. Mathematics - II	Mathematics	02	01	--	03	50		50	0
<b>Note: BC: Science Course, PC: Professional Core. HS: Humanities, NCMC: Non-Credit Mandatory Course. ENV: Environmental Studies, CIP: Constitution of India Professional Ethics and Human Rights</b>												



**V SEMESTER**

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	HS	18HS51/52	M&E / IPR (title as per BOS decision)	HS	3	-	--	03	50	50	100	3
2	PC	18IM51	Operations Research		3	2	--	03	50	50	100	4
3	PC	18IM52	Computer Integrated Manufacturing		2	2	--	03	50	50	100	3
4	PC	18IM53	Design of Machine Elements		3	2	--	03	50	50	100	4
5	PC	18IM54	Quality Assurance and Reliability		2	2	--	03	50	50	100	3
6	PE	18IM55X	Professional Elective -1		3	--	--	03	50	50	100	3
7	PC	18IME01	Open Elective- A		3	--	--	03	50	50	100	3
8	PC	18IML56	Quality Engineering Laboratory		--	--	2	03	50	50	100	1
9	PC	18IML57	Computer Integrated Manufacturing Laboratory		--	--	2	03	50	50	100	1
<b>TOTAL</b>					<b>18</b>	<b>10</b>	<b>4</b>	<b>24</b>	<b>400</b>	<b>400</b>	<b>800</b>	<b>25</b>

**Note: HS: Humanities, PC: Professional Core, MC: Mandatory Course,**

**Electives**

Course code	Professional Electives - 1
<b>18IM551</b>	<b>Advanced Machining Processes</b>
<b>18IM552</b>	<b>Marketing Management</b>
<b>18IM553</b>	<b>Rapid Prototyping</b>
<b>18IM554</b>	<b>Enterprise Resource Planning and e- commerce</b>
<b>18IM555</b>	<b>Data Warehousing and Mining</b>

Course code	Open Elective -A
<b>18IME01</b>	<b>Operations Research</b>



**VI SEMESTER**

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	HS	18HS61/62	M&E/IPR	HS	3	--	--	03	50	50	100	3
2	PC	18IM61	Materials Management		3	--	--	03	50	50	100	3
3	PC	18IM62	Facilities Planning and Design		2	2	--	04	50	50	100	3
4	PC	18IM63	Lean Manufacturing		2	2	--	04	50	50	100	3
5	PC	18IM64	Simulation Modelling and Analysis		2	2	--	04	50	50	100	3
6	PE	18IM65X	Professional Elective - 2		3	--	--	03	50	50	100	3
7	OE	18IME02	Open Elective -B		3	--	--	03	50	50	100	3
8	PC	18IML66	Simulation Laboratory		--	--	2	03	50	50	100	1
9	MP	18IMP67	Mini-project		2	--	--	03	50	50	100	2
10	INT	18IMI68	Industry Internship	(To be carried out during the intervening vacations of VI and VII semesters )			--	--	--	--	--	--
<b>TOTAL</b>					<b>18</b>	<b>06</b>	<b>02</b>	<b>30</b>	<b>400</b>	<b>400</b>	<b>800</b>	<b>24</b>

**Note: PC: Professional core, PE: Professional Elective, OE: Open Elective, MP: Mini-Project, INT: Internship.**

**Electives**

Course code	Professional Electives - 2
<b>18IM651</b>	<b>Project Management</b>
<b>18IM652</b>	<b>Maintenance and Safety Engineering</b>
<b>18IM653</b>	<b>Composite Materials</b>
<b>18IM654</b>	<b>Organizational Behaviour</b>
<b>18IM655</b>	<b>Management Information System</b>

Course code	Open Elective -B
<b>18IM661</b>	<b>Quality Assurance and Reliability</b>



VII SEMESTER												
Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	MC	18HS71/72	CMEP / OSHA	IM/CV	2	--	--	03	50	50	100	2
2	PC	18IM71	Operations Management		2	2	--	03	50	50	100	4
3	PE	18IM72	Supply Chain Management		2	2	--	03	50	50	100	4
4	PE	18IM73 X	Professional Elective -3		3	--	--	03	50	50	100	3
5	PE	18IM74 X	Professional Elective -4		3	--	--	03	50	50	100	3
6	OE	18IM75 X	Open Elective - C		3	--	--	03	50	50	100	3
7	PC	18IML76	Statistics Laboratory		--	--	2	03	50	50	100	1
8	PC	18IML77	ERP & OR Laboratory		--	--	2	03	50	50	100	1
9	Project	18IMP78	Project Work Phase - 1		--	--	2	03	50	50	100	2
10	INT		Internship		(If not completed after VI semester examinations, it has to be carried out during the intervening vacations of VII and VIII semesters )			--	--	--	--	--
<b>TOTAL</b>					<b>15</b>	<b>4</b>	<b>6</b>	<b>27</b>	<b>450</b>	<b>450</b>	<b>900</b>	<b>23</b>
<b>Note: PC: Professional Core, PE: Professional Elective, OE: Open Elective, INT: Internship, MC: Mandatory Course</b>												
<b>Internship:</b> All the students admitted to III year of BE have to undergo mandatory internship of 4 weeks during the vacations of VI and VII semesters and /or VII and VIII semesters. A SEE examination will be conducted during VIII semester and prescribed credits shall be added to VIII semester. Internship is considered as a head of passing and is considered for the award of degree. Those, who do not take-up/complete the internship will be declared as failed and have to complete during subsequent SEE examination after satisfy the internship requirements.												



Electives			
Course code	Professional Electives - 3	Course code	Professional Electives - 4
18IM731	Project Management	18IM741	Design of Experiments
18IM732	Nanotechnology	18IM742	Strategic Management
18IM733	Human Resource Management	18IM743	Product Design and Manufacturing
18IM734	Database Management System	18IM744	Total Quality Management
18IM735	Technology Management	18IM745	Industrial Relations and Labour Welfare
<b>CMEP: Cost Management of Engineering Projects, OSHA: Occupational Safety and Health Administration</b>			

Course code	Open Elective -C
18IM751	Human Resource Management

VIII SEMESTER												
Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	MC	18HS81/82	CMEP / OSHA	IM/CV	2	--	--	03	50	50	100	2
2	Project	18IMP82	Project Work Phase - 2		--	--	2	03	50	50	100	10
3	Seminar	18IMS83	Technical Seminar		--	--	2	03	50	50	100	1
4	INT	18IMI84	Internship	(Completed during the intervening vacations of VI and VII semesters and /or VII and VIII semesters.)			03	50	50	100	2	
<b>TOTAL</b>					<b>2</b>	<b>--</b>	<b>4</b>	<b>12</b>	<b>350</b>	<b>350</b>	<b>700</b>	<b>15</b>

**Note: PC: Professional Core, PE: Professional Elective, OE: Open Elective, INT: Internship, MC: Mandatory Course**

**Internship:** Those, who have not pursued /completed the internship, will be declared as failed and have to complete during subsequent SEE examination after they satisfy the internship requirements.

**CMEP: Cost Management of Engineering Projects OSHA: Occupational Safety and Health Administration**