Agenda Notes

43rd Meeting
of the
Senate

Venue of the meeting:
Conference Hall,
Administrative Block, PDPM IIITDM Jabalpur
Date and Time of the Meeting:
January 08, 2020
From 3:00 p.m. onwards

PDPM

**Indian Institute of Information Technology,
Design and Manufacturing Jabalpur**

Pandit Dwarka Prasad Mishra
India Institute of Information Technology,
Design & Manufacturing Jabalpur

Agenda - 43rd Meeting of the Senate
To be held on January 8, 2020 in the Conference Hall, Administrative Block, of PDPM IIITDM
Jabalpur at 3 p.m.

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Senate/43/1	Overview Report by the Chairperson, Senate

Overview report will be presented by the Chairperson, Senate during the meeting itself.

Senate/43/2	Confirmation of the Minutes of the 42nd meeting of the Senate held on August 28, 2019.

Minutes were circulated. One comment has been received from Dr. P.K. Padhy. Same is placed for consideration of the Senate.

Senate/43/3	Action taken report on the decision of the Senate vide 42nd meeting held on August 28, 2019.

The Action taken report is presented herewith as below:

Sl. No.	Agenda Item	Action taken
Senate/42/08	Introduction of PBI in the Seventh Semester for all UG Students	Implemented
Senate/42/10	Review of academic performance of the students and remedial action for underperforming students	Implemented
Senate/42/11	Master's dissertation submission and evaluation	Notified, will be implemented from the batch of 2019
Senate/42/12	Revision of policy for Swayam Course	Implemented
Senate/42/13	Special Ph.D. program for persons employed in defense establishments	Implemented
Senate/42/14	Change in requirement for PhD admission	Implemented
Senate/42/16	Review of policy for the question paper moderation	No action required
Senate/42/17	Modification in Merit Cum Means (MCM) scholarship rules	Implemented
Senate/42/18	Panel of examiners for Ph.D. thesis evaluation	Implemented
Senate/42/19	Course requirement for PBI and PR499	Notified
Senate/42/21	Introduction of Personality Development Course	Modalities for implementation are in discussion and will be placed during the Senate meeting
Senate/42/21	Rolling advertisement for Ph.D.	Implemented

Senate/43/4	Performance of students in the Semester 1, 2019-20.

Academic performance report of the students will be placed during the meeting for discussion and suggestion to enhance academic standards of the Institute.

Senate/43/5	Review of clause related to attendance of the students

As per the existing rules 75% attendance is mandatory. It has been observed that in few cases the students could not attend required attendance. There is confusion in the students that all leave, etc are to be included while counting 75% attendance. The Senate Is requested to discuss and suggest modification in the statement for the clarity of the students. Following is proposed:

Existing Clause	Proposed Revision
4.9 Attendance a) A course of a student will be dropped if the student fails to secure a minimum 75% of attendance in the total classes/labs held in that course. The student will be marked "CD" grade in the grade sheet in such a case.	**4.9 Attendance** a) A course of a student will be dropped if the student fails to secure a minimum 75% of attendance in the total classes/labs held in that course. The student will be marked "CD" grade in the grade sheet in such a case. **All type of leave, etc including late registration will be included in the remaining 25%.**
b) In special circumstances, relaxation may be permitted to the student in attendance, up to 60 % by the Chairperson, Academic Senate on medical grounds. The medical certificate produced by the student must be approved by the Institute doctor.	b) In special circumstances, relaxation may be permitted to the student in attendance, up to 60 % by the Chairperson, Academic Senate on the recommendation of the Dean Academic .**For promoting the Startup, those students who have registered their Startup will be given an additional relaxation of 25% of the attendance.**
c) The course instructor will maintain the attendance record regularly and inform the students who fail to satisfy the criterion of 75% of attendance in each month through the course web page/general (written) notice.	c) The course instructor will maintain the attendance record regularly and inform the students who fail to satisfy the criterion of 75% of attendance in each month through the course web page/general (written) notice/ **email with a copy to academic office.**

Senate/43/6	Approval of new courses

A list of new courses proposed alongwith the course content is attached as **Annexure 'I'** for the approval of the Senate.

Senate/43/7	Preparatory programme for foreign students

The Institute wishes to promote admission of the students of foreign national through Study in India programme. Some of these students (particularly admitted in PG programmes) are not accustomed to the Institute environment and face problems. It is proposed that for such students a preparatory programme (3 to 6 months duration) will be prepared by the concerned discipline on case to case basis to bring them to the main stream. Same will be notified to the academic office and put in the Senate.

Senate/43/8	Creation of post doc positions

It is proposed to introduce post docs positions as follows:
Computer Science and Engineering: 2 positions
Electronics and Communication Engineering: 2 positions
Mechanical Engineering: 2 positions
Design: 1 position
Natural Science: 1 position

These post docs will be recruited to promote the areas in line with the Institutes priority area of research as decided by the Chairperson Senate from time to time. They will be placed on consolidated pay for the entry grade of Assistant Professor of the Institute.

Senate/43/9	Revision of seats and specialization for M. Tech admissions

A proposal for the revision of seats and specialization will be placed during the Senate meeting.
Further, it is proposed that on 50% of the seats admission will be taken through CCMT and for remaining 50% the Institute will conduct its own admission process

Senate/43/10	Introduction of Dual Degree (M.Tech+Ph.D)

Proposal for admission in Dual Degree (M.Tech.+Ph.D.) is attached as **Annexure 'II'.**

Senate/43/11	Proposal to change grade structure

It is proposed to remove the grade "D" instead of it grade "F" will be corresponding to numeric point 3. The Senate is requested to accord its approval. Further it is proposed to implement it from the forthcoming batch of 2020.

Senate/43/12	Proposal for implementation of Personality Development course

A proposal for implementation of Personality Development course for the Undergraduate/Graduate students of IIITDM Jabalpur is placed before the Senate for deliberation as **Annexure – 'III'.**

Senate/43/13	Proposal for minor degree offering

A proposal for the same will be placed during the Senate meeting.

Senate/43/14	Proposal to map Swayam grades with institute grades

A proposal for the same will be placed during the Senate meeting.

Senate/43/15	Proposal to revise DS302 Engineering Design Course

Proposal to revise course on Engineering Design DS302 was circulated among the Senate members but enough responses were not received. Proposal with comments of the Senate members received are placed as **Annexure 'IV'** before the Senate for deliberation and subsequent approval.

Senate/43/16	Discussion on Cheating Cases

Various cheating cases have been reported during the end semester examination. A report of the same will be placed during the Senate meeting. The Senate is requested to deliberate and advise to curb such activities.

Senate/43/17	Ratification for the approval by the Chairperson, Senate

From time to time approvals are accorded by the Chairperson, Senate for emergent cases. Same is placed before the Senate as **Annexure – 'V'** for ratification.

Senate/43/18	Issue of duplicate degree/grade sheets and other certificate.

Certain cases have come to light where pass-out students often approach the Institute for issuance of duplicate degrees/grade sheets/other certificates which are lost due to some unforeseen circumstances. Currently the under-mentioned procedure to issue duplicate certificates is in vogue:

- Submission of application/request by the student regarding loss of degree/grade sheets alongwith FIR.
- Approval is taken by Academic Section for issue of duplicate degree.
- After submission of required fee, degree/grade sheets are printed and issued to the students.

Keeping in view the present academic scenario and the changing needs of time, it is proposed that proper guidelines for issuance of duplicate certificate should be framed and subsequently incorporated in the relevant manuals. It is also proposed that a committee may be formed to formulate such guidelines which will successively submit its recommendations to the Chairperson, Senate for his approval.

Senate/43/19	Addendum to Minutes of Agenda No. 42/11 of the 42nd Senate meeting held on August 28, 2019

Dr. Prabin Kumar Padhy has suggested the following addendum to be incorporated as a penultimate para in the relevant Minutes of Agenda item No. 42/11:

"On M.Tech Dissertation the thesis evaluation will be by letter grade and it will be awarded by external examiner only".

The same is placed before the Senate for approval.

Senate/43/20	Waiver of USD 1000 to the students of SAARC countries

Under the Study-in-India programme of MHRD students from various SAARC nations enroll themselves to pursue higher studies in various Indian Universities. Applications for admission to various UG and PG programs of the Institute are received from cross-national students from these SAARC nations every academic year. Certain instances have come to light where students after enrolling themselves under various UG and PG programs of the Institute are compelled to withdraw after registration owing to high rate of annual fees. In view of the above, Prof.-in-Charge (Academic) has proposed waiver of Annual Fee by USD 1000 for UG and PG program in respect of students of SAARC Nations as follows:

S. No.	Program	Current annual fees for Indian Students	Current annual fees for Students of SAARC nations	Proposed annual fees for Students of SAARC nations after waiver of USD 1000
1.	B.Tech	USD 4000	USD 5000	USD 4000
2.	M.Tech	USD 4500	USD 5500	USD 4500

The same is placed before the Senate for deliberation.

Senate/43/21	Any other item with the permission of the Chair.

(Swapnali D. Gadekar)
Acting Registrar & Secretary (Senate)

Chairperson (Senate)

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NOTE –I

IIITDMJ/RO/Senate/2019
Dated: October 30, 2019
Sheet No: one of one

Sub: Addendum to Minutes of Agenda item No. 42/11 of the 42nd Senate meeting
held on August 28, 2019.

Placed opposite please find the comments of Dr. Prabin Kumar Padhy, Associate
Professor vide his E-mail dated October 18, 2019 on the minutes of the 42nd meeting of
the Senate held on August 28, 2019.

As suggested by Dr. Prabin Kumar Padhy and Smt. Swapnali D. Gadekar, Acting Registrar
& Secretary, Senate (on leave) the following addendum needs to be incorporated as a
penultimate para in the relevant Minutes of Agenda item No. 42/11:

"On M.Tech Dissertation the thesis evaluation will be by letter grade and it will be
awarded by external examiner only".

Submitted for your perusal please.

(Sachin Kumar Jain)
Acting Registrar & Secretary (Senate)

Chairperson (Senate)

IIITDM
JABALPUR

Registrar IIITDMJ <registrar@iiitdmj.ac.in>

Forwarding of minutes of the 42nd Senate meeting of PDPM-IIITDM Jabalpur

prabin16 prabin16 <prabin16@iiitdmj.ac.in>   Fri, Oct 18, 2019 at 11:47 AM
To: Registrar IIITDMJ <registrar@iiitdmj.ac.in>
Cc: Aparajita Ojha <aojha@iiitdmj.ac.in>, Puneet Tandon <ptandon@iiitdmj.ac.in>, Vijay Kumar Gupta
<vkgupta@iiitdmj.ac.in>, tanush tanush <tanush@iiitdmj.ac.in>, pnkondekar pnkondekar
<pnkondekar@iiitdmj.ac.in>, Atul Gupta <atul@iiitdmj.ac.in>, Prashant IIIT Jain <pkjain@iiitdmj.ac.in>, "Dinesh
Kumar V." <dineshk@iiitdmj.ac.in>, Prabir Mukhopadhyay <prabir@iiitdmj.ac.in>, subirs subirs
<subirs@iiitdmj.ac.in>, balyan balyan <balyan@iiitdmj.ac.in>

Dear Madam
Following decision in the agenda 42/11 on MTech Dissertation , it was decided that thesis evaluation will be by
letter grade and it will be awarded by external examiner only. It is missing in the minutes. Please check it.

Regards

Prabin

[Quoted text hidden]
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Dr Prabin Kumar Padhy
Associate Professor, Dean Academic
PDPM Indian Institute of Information Technology Design and Manufacturing
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(An Institute established by MHRD, Govt. of India)

Email: dean.acad@iiitdmj.ac.in, prabin16@iiitdmj.ac.in

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PDPM
Indian Institute of Information Technology, Design and Manufacturing, Jabalpur

Date: 20-11-2019

NOTE 1

Following are the courses received from respective discipline/Head and all the courses are forwarded by APCS Committee for their recommendation, also forwarded by Professor in Charge Academic and for approval for Chairperson Senate.

A. Mechanical Engineering Discipline:

Sl No.	Course Number	Title	New/Modification	Mode	Programme	Instructor
1.	ME649	Simulation of Manufacturing Systems	New	Elective	UG/PG (CSE & ME)	Dr. H Chelladurai
2.	ME620a	Business Analytics Using R	New	Elective	UG/PG (CSE & ME)	Dr. Sunil Agrawal
3.	ME692	Industry Internet of Things	New	Elective	UG/PG (ME, ECE & CSE)	Prof. Vijay Kumar Gupta
4.	ME694	Electric Vehicle and Mobility	New	Elective	UG & PG (All Disciplines)	Prof. Tanuja Sheorey
5.	ME652	Virtual Instrumentation	New	Elective	UG/PG	Dr. M Z Ansari
6.	ME691	Synthesis and Innovation	New	Elective	UG/PG (Open to All)	Prof. Puneet Tandon

B. Design Discipline:

Sl No.	Course Number	Title	New/Modification	Mode	Programme	Instructor
1.	DS567	Ergonomics for Industrial Safety Design	New	Elective	M.Des	Dr. Sangeeta Pandit
2.	DS617	Humanization	New	Open Elective	UG/PG	Dr. Prabir Mukhopadhyay
3.	DS540	Cultural Ergonomics	New	Open Elective	UG/PG	Dr. Prabir Mukhopadhyay

C. Computer Science & Engineering Discipline:

Sl No.	Course Number	Title	New/Modification	Mode	Programme	Instructor
1.	EM601i	Mesh Free Construction and Programming	New	EMF	UG/PG	Dr. Manish Bajpai

D. Electronics & Communication Engineering Discipline:

Sl No.	Course Number	Title	New/Modification	Mode	Programme	Instructor
1.	EC661	AI Techniques: Neural Networks & Fuzzy Logic	Modified	Elective	UG/PG	Dr. Irshad Ansari

E. Natural Science Discipline:

Sl No.	Course Number	Title	New/Modification	Mode	Programme	Instructor
1.	PHY615	Materials Characterization	New	Elective	UG/PG	Dr. Yashpal Singh Katharria
2.	NS406e	Study of Dynamical Systems via Bioconvection	New	Elective	UG/PG	Dr. Manoj Kumar Panda

विजय उमर गुप्ता
21-11-2019
Vijay Kumar Gupta
Professor in Charge Academic

Chairperson Senate

1330
21/11/19

Dt. ....2/11/19.....
D.R. No. ....

D.D. No 6259
Dt. 25/11/19

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for a new course/Modification in a course

I. Course Title: Simulation of Manufacturing systems

II. Proposed Course Number: ME6..

III. Units: Lecture 3   Tutorial 0   Lab 0   Credit 4

IV. Mode: core/Elective/EMF: Elective

V. Evaluation Scheme: Mid Sem Weightage: 35% , End Sem Weightage : 50% & Quiz:15%

VI. Semester: Even semester

VII. Programme: BTech, MTech & Ph.D

VIII. Learning Objective: Simulation is a rigorous, computer supported was of evaluating a process though stochastic modeling. Typical uses for simulation in a process modeling initiative include
- Documenting, visualizing, and demonstrating the dynamics of a process
- Predicting system performance based on key metrics such as costs, though-put, cycle time and utilization
- Identifying process bottlenecks such as queue buildup and over-utilized resources
- Planning staff, equipment, or material requirements

IX. Detailed Course Content:

Module1: Introduction: A review of basic probability and statistics, random variables and their properties, Estimation of means variances and correlation.	5 H
Module2: Physical Modelling: Concept of System and environment, Continuous and discrete systems, Linear and non-linear systems, Stochastic activities, Static and Dynamic models, Principles of modeling, Basic Simulation modeling, Role of simulation in model evaluation and studies, advantages of simulation	12 H
Module3: Probability Concepts in Simulation: Stochastic variables, discrete and continuous probability functions, Random numbers, Generation of Random numbers, Variance reduction techniques, Determination of length of simulation runs.	12H
Module4: Simulation of Manufacturing Systems: Simulation of waiting line systems, Job shop with material handling and Flexible manufacturing systems, Simulation software for manufacturing, Case studies. Simulation of Mechanical Systems: Building of Simulation models, Simulation of translational and rotational mechanical systems, Simulation of hydraulic systems.	13 H
Text/Reference books: Text Book: System Simulation by Geoffrey Gordon, Prentice Hall References:	

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1. System Simulation: The Art and Science Robert E. Shannon, Prentice Hall

2. System Modelling and Control J. Schwarzenbach and K.F. Gill Edward Arnold

3. Modelling and Analysis of Dynamic Systems Charles M Close and Dean K. Frederick Houghton Mifflin

4. Discrete event system Simulation - third edition- Jerry banks et al, Low price edition

Signature of the proposer (s):

Recommendation of the Head
(With recommendation from discipline/specialization/Programme)

1. Number of credits inline with the Institute policy: Yes / No
2. The course may also be offered to: UG/PG   ME/CSE Disciplines/Programmes
3. Portion of contents repeated: NIL
4. Course is assigned ME645 number
5. Any other point:

27-10-2019

(Head, ME Discipline)

Recommendation of the APCS

Recommended/Not recommended

(Member1)   (Member2)   (Member3)   (Member4)   (Member5)   (Convener)

18-11-2019

Dean Academic

Approved/ Not Approved

Chairperson Senate

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for a new course/Modification in a course

I.   Course Title: Business Analytics Using R

II. Proposed Course Number: ML 620 9

III. Units: Lecture 2   Tutorial   Lab 2   Credit 4

IV. Mode: core/Elective/EMF: Elective

V.   Evaluation Scheme: Quiz (10%), Lab (20%), Mid sem exam (30%), End sem exam (40%)

VI. Semester: II

VII. Programme: BTech/BDes/MTech/MDes

VIII. Learning Objective: The course is designed to provide in-depth knowledge of handling data and Business Analytics' tools that can be used for fact-based decision-making using real case studies.
Primary objectives of the course are:

1. Understand the emergence of business analytics as a competitive strategy.

2. Learn to analyze data using statistical learning and machine learning algorithms to enable data driven decision making.

3. Learn data visualization and storytelling through data.

4. Learn descriptive, predictive and prescriptive analytics techniques and tools.

5. Learn to analyze data using supervised and unsupervised machine learning algorithms.

6. Analyse problems from different sectors like manufacturing, service, banking and finance, sports, pharmaceutical, and aerospace etc.

7. Hands on experience with software/packages such as Microsoft Excel, R, Python.

IX. Detailed Course Content:

Module1: Predictive Analytics using Supervised Learning Algorithms - Simple linear regression: coefficient of determination, significance tests, residual analysis, confidence and prediction intervals; Multiple linear regression: coefficient of multiple coefficient of determination, interpretation of regression coefficients, categorical variables, heteroscedasticity, multicollinearity, outliers, auto-regression and transformation of variables. Logistic and Multinomial Regression.	10 H
Module2: Classification and Regression Trees (CART); Forecasting: Moving average, exponential smoothing, Trend, cyclical and seasonality components, ARIMA (autoregressive integrated moving average); Application of predictive analytics in retail, direct marketing, health care, financial services, insurance, supply chain etc.	10 H
Module3: Ensemble Methods: Introduction to ensemble methods, random forest and boosting algorithms; Reinforcement Learning Algorithms: Markov chain and Markov Decision Process.	10 H
Module4: Prescriptive Analytics: Introduction to Operations Research (OR), linear programming (LP), formulating decision problems using linear programming, sensitivity analysis: shadow price and reduced cost, Applications of linear programming in product mix, blending, cutting stock, transportation, transshipment, assignment, scheduling, planning and revenue management problems; Integer Programming (IP) problems, mixed-integer and zero-one programming. Applications of IP in capital budgeting and set covering.	10 H
Following case studies will be discussed: 1. Predicting Bank-Loan Defaults with Logistic Regression Model 2. Sales Forecasting for Gen Retailers with Seasonal ARIMA (SARIMA) Model 3. Predicting Customer Churn with Decision Tree Model	

4. Predicting Probability of Malignant and Benign Breast Cancer with **Random Forest Model**
5. Predicting Flight Delays with **Multiple Linear Regression** Model
6. Customer Segmentation with RFM Model and K-means Clustering

Text/Reference books:
1. Business Analytics: The Science of Data-Driven Decision Making by U Dinesh Kumar, Wiley Publication, ISBN: 9788126568772
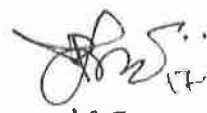
Signature of the proposer (s): Sunil Agrawal
15/10/19

Dr. SUNIL AGRAWAL

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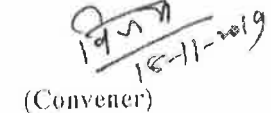
Recommendation of the Head
(With recommendation from discipline/specialization/Programme)

1. Number of credits inline with the Institute policy: Yes / No
2. The course may also be offered to: UG/PG ME/CSE Disciplines/Programmes
3. Portion of contents repeated: Not 30%
4. Course is assigned ME 620 a number
5. Any other point:

17-10-2019

(Head, ME_____ Discipline)

Recommendation of the APCS

Recommended/Not recommended

22/10/19   M. Dalit

(Member1)   (Member2)   (Member3)   (Member4)   (Member5)   (Convener)   18-11-2019

18-11-2019

Dean Academic

Approved/ Not Approved

Chairperson Senate

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PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for a new course/Modification in a course

I. Course Title: Industry Internet of Things (IIoT)

II. Proposed Course Number: ME 692

III. Units: Lecture 02   Tutorial 00   Lab 02   Credit 04

IV. Mode: Elective

V. Evaluation Scheme: Quiz: 15%, Mid Sem: 15%, Lab: 15%, Project: 15%, End Term: 40%

VI. Semester: PG or VIII Sem B.Tech.

VII. Programme: BTech and MTech

VIII. Learning Objective:

In today's world everything is connected through Internet. Industries are also getting connected with internet and lot of information has been shared between machine-machine, man-machine. This course introduce the IoT and IIoT with special emphasis towards manufacturing. Implementation of industrial processes and specialized control devices and protocols for IIoT will be discussed. The process of identifying and connecting to different industrial data sources gathered from different sensors will be discussed and connected to cloud network such as AWS IoT, Azure IoT, Google IoT, and OEM IoT platforms, and extract data from the cloud to the devices. Theory will be supported with the hands on practice in the lab. By the end of the course you will know the basic concepts related to IIoT in particular Industry 4.0, which can be implemented in the real world. The course will be more focused towards the implementation of IoT in manufacturing industries.

IX. Detailed Course Content:

Module1: Introduction to IoT, Evolution of Internet, Mobile Internet, Internet of Things, Things in IoT, IoT key technologies, Smart home and industry, IoT Versus IIoT	2 H
Module2: Industrial Internet of Things: Technical Requirements, The industrial process, the CIM pyramid, Industry data flow.	2 H
Module3: Industrial Data Flow and Devices, The IIoT data flow in the factory, measurements and the actuator chain, controllers, Industrial Protocols, SCADA, Historian, ERP and MES	3 H
Module4: Applying Smart Manufacturing to Assembly Processes (Discrete, Process, Advanced Materials & Additive Manufacturing) with underlying technology options and "Before and After" Process Flows.	3 H
Module 5: Collecting sensor data from the point of manufacture by bringing component suppliers and service partners (including 3PLs) into the fold. Includes best practices for supplier programs that benefit both parties.	3 H
Module 6: Using sensor technology to improve quality of service and reverse logistics once the finished product is in the hands of the customer. Using "digital twins" as well as adding smart capabilities to products that provide predictive maintenance and help minimize	3 H

downtime.	
Module 7: Developing Industrial IoT and Architecture, OSCGi, microservice, containers and serverless computing	3H
Module 8: Industrial OEM Platforms, The Predix Platform, other platform Cloud Industrial IoT Solution with AWS, Google Cloud Performing a Practical Industrial IoT Solution with Azure	3 H
Module 9: Adding Sensors to Existing Machinery : Instrumenting legacy equipment and processes with plug-and-play sensors to monitor assets, energy use and to provide documentation at point of use.	3 H
Module 10: Sensor Data Management: Understanding what types of data are required for real-time decisions and for future analysis. Examples of using sensor data for alerts, dashboards, analytics and machine learning	3 H

Labs:
  1. Hands on with Microcontroller
  2. Connecting Sensors and actuators
  3. Design an ambient Temperature and humidity Station, using Nodemcu and read the values on Serial Interface
  4. To Interface MPU6050 Gyro. Module with Nodemcu using I2c Protocol and read the values on Serial Interface.
  5. To make a weather Web server using Nodemcu and sending the data of DHT11 sensor to Web page as well as on serial port.
  6. To make a weather server http client using Nodemcu and receiving the data of DHT11 sensor from server on serial port.
  7. To know your location using Google geo-location API using Nodemcu.
  8. To control a motor from a mobile phone. Provide a video with the servo motor moving when the button is pressed on the mobile
  9-12. Implementing IIoT for workshop
	2 H each

Text/Reference books:
1. Giacomo Veneri and Antonio Capasso, "Hands-on Industrial IoT", Packt Publishing
2. Peter Waher, "Mastering Internet of Things: Design and create your own IoT applications using Raspberry Pi 3", Packt Publishing
3. Vijay Madisetti, Arshdeep Bahga, Internet of Things, "A Hands on Approach", University Press
4. Dr. SRN Reddy, Rachit Thukral and Manasi Mishra, "Introduction to Internet of Things: A practical Approach", ETI Labs
5. Pethuru Raj and Anupama C. Raman, "The Internet of Things: Enabling Technologies, Platforms, and Use Cases", CRC Press
6. Adrian McEwen, "Designing the Internet of Things", Wiley
7. Raj Kamal, "Internet of Things: Architecture and Design", McGraw Hill
8. Cuno Pfister, "Getting Started with the Internet of Things", O Reilly Media

Signature of the proposer (s):

Recommendation of the Head
(With recommendation from discipline/specialization/Programme)

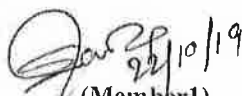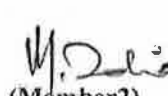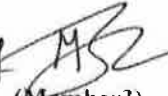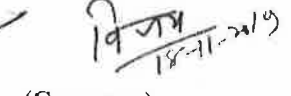1. Number of credits inline with the Institute policy: Yes / No

2. The course may also be offered to: _ECE, CSE_ Disciplines/Programmes

3. Portion of contents repeated: NIL

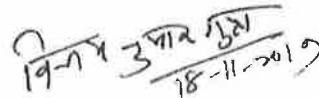4. Course is assigned ME692 number

5. Any other point:

(Head, _ME_ Discipline)

Recommendation of the APCS

Recommended/Not recommended

(Member1) (Member2) (Member3) (Member4) (Member5) (Convener)

Dean Academic

Approved/ Not Approved

Chairperson Senate

3/3

17

15

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for a new course

I. Course Title: **Electric Vehicle and Mobility**

II. Proposed Course Number: 6th level course   ME-694

III. Units: Lecture 2L.   Tutorial NIL.   Lab   NIL.   Credit 03

IV. Mode: core/Elective/EMF: Elective

V. Evaluation Scheme: Quiz (02): 10%, Mid Sem (30%), Project / Term Paper: 15%, Assignment: (5% and End Sem (40%)

VI. Semester: First

VII. Programme: BTech/BDes/MTech/MDes: **B. Tech, M. Tech**

> **Learning Objective:** Aims to learn impact of EVs on the road. Does the environmental gain from vehicle electrification justify heavy investment in charging infrastructure? Whats the economics of EVs on the road? How long will it last? Whats the prospects of EVs with IOT?
>
> This course will help acquire elements from engineering science, sociology, environmental science, political science, economics, management science, in order to evaluate, analyze and implement the diffusion of electric vehicles where their use is relevant.
>
> The course will be useful for post-graduate students and final year undergraduate students.

VIII. Detailed Course Content:

Module1: Understand Mobility and its Evolution	
1.1 Mobility, Urban Forms and Ways of Life	3 H
1.2 1.2 Electric Mobility: Specifications and Evolutions	
Module2: Electric Mobility and Environmental Impact Reduction	
2.1 Climate Change	
2.2 Local Impacts of Transportation	7 H
2.3 Life-Cycle Assessment (LCA)	
Module3: – Economic Analysis	
3.1 Economic Analysis Tools and Concepts	
3.2 Electric Mobility and Environment: Economic Balance	6 H
3.3 Macroeconomic Scale	
3.4 Microeconomic Scale	
Module4: Electric Mobility and Infrastructures: Technical and Economic Dimensions	
4.1 Issues and Situational Analysis	8 H
4.2 Electric Mobility Business	
Module 5: Electric Mobility, Connected Mobility	
7.1 Mobility Services	4 H
7.2 Connected Mobility, Autonomous Mobility	
Text/Reference books:	
1. Coursera or other web links (https://www.coursera.org/learn/electric-vehicles-mobility)	

Tanuja Sheorey

14

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Recommendation of the Head
(With recommendation from discipline/specialization/Programme)

1. Number of credits inline with the Institute policy: Yes / No

2. The course may also be offered to: ___All___ Disciplines/Programmes

3. Portion of contents repeated: NIL

4. Course is assigned ME 694 number

5. Any other point:

17-10-2019

(Head, ME Discipline)

Recommendation of the APCS

Recommended/Not recommended

(Member1) 22/10/19   (Member2)   (Member3)   (Member4)   (Member5)   (Convener)

18-11-2019

Dean Academic

Approved/ Not Approved

Chairperson Senate

13

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for a new course/Modification in a course

I. Course Title: **Virtual Instrumentation using LabVIEW**

17-10-2019

II. Proposed Course Number:

III. Units: Lecture **2** Tutorial **0** Lab **2** Credit **4**

IV. Mode: Core/Elective/EMF: **Elective**

V. Evaluation Scheme: **Quiz I (10%), Midterm (20%), Quiz II (10%), End term (30%) Lab (30%)**

VI. Semester: **VIII**

VII. Programme: **BTech/MTech**

VIII. Learning Objective:

    a. **To teach students basics and application of data acquisition through virtual inst**

    b. **To teach students basic sensors and actuators used in industrial applications**

    c. **To teach students instrumentation**

IX. Detailed Course Content:

Module 1: Virtual Instrumentation and LabVIEW: Introduction, Graphical System Design (GSD) Model, Virtual Instrumentation (VI), Hardware and Software in VI, VI in Engineering Process, GSD using LabVIEW, Creating VI, Palettes, Block Diagram, Modular Programming, Icon and Connector Pane, Creating SubVIs, Creating Stand-alone Application, Repetition, Loops, Arrays, Clusters, Plotting Data, File I/O, Instrument Control.	**12 H**
Module 2: Sensors & Actuators: Measurement Techniques, Classification of errors, Sensors and Actuators Characteristics, Temperature Sensors, Displacement sensors, Acceleration Sensors, Force/Pressure/Torque Sensors, Magnetic Sensor, AC/DC Electric Motors, Piezoelectric Sensors,	**6 H**
Module 3: Data Acquisition: Signals, Signal Conditioning, DAQ Hardware Configuration, DAQ Hardware, Analog I/O, Digital I/O, Counters, DAQ Software Architecture, DAQ Assistant, Channels Configuration, Selecting and Configuring a Data Acquisition Device, Components of Computer Based Measurement System	**6 H**
Module 4: Motion Control: Components of Motion Control, Software Components for Configuration, Motion Controller, Move Types, Motor Amplifiers and Drives, Motor Fundamentals, Feedback Devices and Motion I/O.	**4 H**

List of Experiments	
[1] Thermocouple/RTD Instrumentation	[6] Control of a DC Motor
[2] Strain Gauge/Load-cell Instrumentation	[7] Control of a Stepper Motor
[3] Pressure Sensor Instrumentation	[8] Control of a Servo Motor
[4] LVDT Instrumentation	[9] Voice Coil Actuator Instrumentation
[5] Accelerometer Instrumentation	[10] Piezoelectric Sensor Instrumentation

Text book:

    1. J. Jerome, Virtual Instrumentation using LabVIEW, PHI India (2010)

Reference books:

    1. S. Gupta and J. John, Virtual Instrumentation using LabVIEW, Tata MaGraw-Hill (2005)

    2. D. Patranabis, Sensors and Transducers, PHI India (2003)

    3. Academic Resources from www.ni.com

Signature of the proposer: Dr. MZ Ansari, MED 03/10/2019

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PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Recommendation of the Head
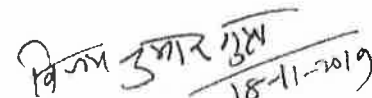### (With recommendation from discipline/specialization/Programme)

1. Number of credits in line with the Institute policy: **Yes**

2. The course may also be offered to: **MTech** Programme

3. Portion of contents repeated:
   - (i) ES205 **Fundamental of Robotics** [~5%]
   - (ii) ES406c **Sensors and Actuators** [~15%]
   - (iii) MT603 **Sensors and Actuators** [~20%]

4. Course is assigned **ME 652** number

5. Any other point:

Please restrict the no. of total students to 35 only. — M2nd

17-10-2019

(Head, **ME** Discipline)

Recommendation of the APCS

Recommended/Not recommended

22/10/19 M2nd

(Member1)   (Member2)   (Member3)   (Member4)   (Member5)   (Convener) 18-11-2019

18-11-2019

Dean Academic

Approved/ Not Approved

Chairperson Senate

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for a new course/Modification in a course

I. Course Title: **Synthesis and Innovation**

II. Proposed Course Number: ME6XX / DS6XX

III. Units: Lecture 2 Tutorial 2 0 Lab Nil 2 Credit 04 $(2-0-2-4)$

IV. Mode: core/Elective/EMF: Elective

V. Evaluation Scheme: Quizzes (2 in number) (10%), MidSem Exam (20%), Assignments (10%), Project (20%), EndSem Exam (40%)

VI. Semester: IV / V / VI

VII. Programme: BTech/BDes/MTech/MDes Open Elective (Open to all)

VIII. Learning Objective: How change in perspective transforms engineers and designers to focus on synthesis and inspires innovation.

IX. Detailed Course Content:

Module1: Introduction: Thinking, Converting Need to Demand, People Perspective, Human-Centered Design, Mental Matrix, Fundamental Principles of Interaction	7 H
Module2: Thinking to Building: The Power of Prototyping, Experiential Learning, Importance of Documentation and Messaging, Storytelling	7 H
Module3: Change: Transformation of organization to Innovative Thinking, The Social Network, Creative Activism, Inspiring Solutions with Global Potential	7 H
Module4: Designing for Today and Tomorrow: Case Studies	7 H

The course will include 3 Lab sessions on each of the modules.

Text books:
1. Tim Brown, Change by Design, Harper Collins, 2009
2. Don Norman, The Design of Everyday Things, Basic Books, 2013

Reference books:
1. Hasso Plattner Christoph Meinel, Larry Leifer, Design Thinking Research – Buildin Innovation Eco-Systems, Springer, 2014
2. Daniel Kahneman, Thinking, Fast and Slow, Farrar, Straus and Giroux, New York, 2011
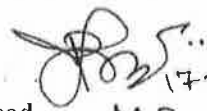
Signature of the proposer (s):

27-09-2018

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR
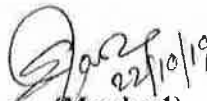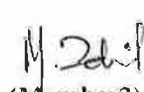
Recommendation of the Head
(With recommendation from discipline/specialization/Programme)

1. Number of credits inline with the Institute policy: Yes / No
2. The course may also be offered to: BTech / BDes Disciplines/Programmes MTech/MDes
3. Portion of contents repeated: NIL
4. Course is assigned ME 691 number
5. Any other point:

17-10-2019

(Head, ME Discipline)

Recommendation of the APCS

Recommended/Not recommended

(Member1) 22/10/19   (Member2)   (Member3)   (Member4)   (Member5)   (Convener)

18-11-2019

Dean Academic

Approved/ Not Approved

Chairperson Senate

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PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for a new course

I. Course Title: Ergonomics for Industrial Safety Design
II. Proposed Course Number: DS
III. Units: Lecture 02   Tutorial 00   Lab   02   Credit 04
IV. Mode: core/Elective/EMF: Elective
V. Evaluation Scheme: Exams, projects and assignments
VI. Semester: II
VII. Programme: BTech/BDes/MTech/MDes: MDes
VIII. Learning Objective: This course will be helpful on preventing occupational illnesses and injuries.
IX. Detailed Course Content:

Module1: Occupational Health and Safety Management	10 H
Module2: Equipment, Workplace, and Environmental Design	!0 H
Module3: Human Error and Human Reliability Analysis	10 H
Module4: Warnings and Hazard Communications Use of Personal Protective Equipment in the Workplace	

Text/Reference books:
1. Burke, M. J. (1991). Applied ergonomics handbook. CRC Press.
2. D Alexander, 1998,"Applied Ergonomics" (CRC Press)
3. Sanders, M. S., & McCormick, E. J. (1987). Human factors in engineering and design .McGraw-Hill book company.
4. Salvendy, G. (2012). Handbook of human factors and ergonomics. John Wiley & Sons.

27/9/19.

Signature of the proposer (s):

Recommendation of the Head

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR
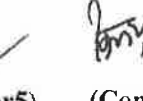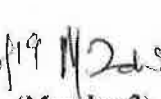
(With recommendation from discipline/specialization/Programme)

1. Number of credits inline with the Institute policy: Yes / No
2. The course may also be offered to: _____ N A _____ Disciplines/Programmes
3. Portion of contents repeated: N one
4. Course is assigned __ DS-567 __ number
5. Any other point:

(Head, _____ Discipline)

Recommendation of the APCS

Recommended/Not recommended

(Member1)   (Member2)   (Member3)   (Member4)   (Member5)   (Convener)

Dean Academic

Approved/ Not Approved

Chairperson Senate

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PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for a new course

I. Course Title: Technology Humanization

II. Proposed Course Number: DS 617

III. Units: Lecture 02   Tutorial NIL   Lab 02   Credit 04

IV. Mode: core/Elective/EMF: Open Elective

V. Evaluation Scheme: Examination (30%), Assignment(30%), Project (40%)

VI. Semester: 1/II

VII. Programme: BTech/MTech/PhD(all streams)

VIII. Learning Objective: This course exposes the students the need for technology humanization for empowering man in a man-technology-environment system.

IX. Detailed Course Content:

Module1:	
Introduction to ergonomics, evolution of man and technology, application of technology humanization in different fields, man-machine-system	10 H
Module2:	
Human dimensions, anthropometry, percentile value	!0 H
Module3:	
Human factors in design of space and products	
Module4:	
Human factors in communication, interface and interaction	

Text/Reference books:

1. Dul, J., & Weerdmeester, B. (2003). *Ergonomics for beginners: a quick reference guide.* CRC press.

2. Singleton, W. T. (Ed.). (1982). *The body at work: Biological ergonomics.* Cambridge University Press.

3. Salvendy, G. (Ed.). (2012). *Handbook of human factors and ergonomics.* John Wiley & Sons.

4. Pheasant, S., & Haslegrave, C. M. (2018). *Bodyspace: Anthropometry, ergonomics and the design of work.* CRC P

Signature of the proposer (s):   **Dr Prabir Mukhopadhyay, Design Discipline**

Recommended
to be offered as open elective

Recommendation of the Head
(With recommendation from discipline/specialization/Programme)

1. Number of credits in line with the Institute policy: Yes / No

2. The course may also be offered to: _N S ._ Disciplines/Programmes

3. Portion of contents repeated: _None ._

4. Course is assigned DS 617 number

5. Any other point: _NA_

(Head, Design Discipline)

Recommendation of the APCS

Recommended/Not recommended

(Member1) (Member2) (Member3) (Member4) (Member5) (Convener)

Dean Academic

Approved/ Not Approved

Chairperson Senate

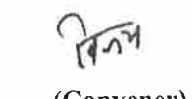# PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for a new course

I. Course Title: Cultural Ergonomics
II. Proposed Course Number: DS 540
III. Units: Lecture 02   Tutorial None Lab   02   Credit 04
IV. Mode: Elective: Open Elective
V. Evaluation Scheme: Assignment(20%), Examination(60%), Project(20%)
VI. Semester: I/II
VII. Programme: Open to MDes, BDes and BTech
VIII. Learning Objective: To apply the principles of Cultural Ergonomics in design and technology for the purpose of making it more humane.
IX. Detailed Course Content:

Module1: Introduction to cultural ergonomics, evolution, application areas and relevance in the world today	10 H
Module2: Justification of cultural ergonomics, Models of Cultural Ergonomics	!0 H
Module3: Inclusive research in design and technology related to cultural ergonomics	10 H
Module4: Dimensions, language, color, usability and culture, economics and cultural ergonomics	10 H

Text/Reference books:

1. Cultural Ergonomics: A World Perspective 1st Edition, Michael Kaplan, CRC Press

2. Cultural Ergonomics: Theory, Methods, and Applications, Tonya L. Smith-Jackson, Marc L. Resnick, et al., CRC Press

Signature of the proposer (s):   Dr Prabir Mukhopadhyay, Design Discipline

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

The course is recommended to be offered as an open elective

Recommendation of the Head
(With recommendation from discipline/specialization/Programme)

1. Number of credits inline with the Institute policy: Yes
2. The course may also be offered to: _MTech_____ Disciplines/Programmes
3. Portion of contents repeated: NA
4. Course is assigned _DS 542_____ number
5. Any other point: NM

(Head, _Design_____ Discipline)

Recommendation of the APCS

Recommended/Not recommended

(Member1)   (Member2)   (Member3)   (Member4)   (Member5)   (Convener)

Dean Academic

Approved/ Not Approved

Chairperson Senate

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PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for a new course/Modification in a course

I. Course Title: **AI Techniques: Neural Networks & Fuzzy Logic**

II. Proposed Course Number: EC 66/

III. Units: **L-3 T-0 P-0**

IV. Mode: core/Elective/EMF: **Elective**

V. Evaluation Scheme: Quiz I (10%), Mid-Term (20%), Quiz II (10%), End-Term (40%), Project (20%)

VI. Semester: **I/II**

VII. Programme: M. Tech (Power and Control/ Microwave and Communication Engineering/ Micro and Nano-Electronics/ Mechatronics)

VIII. Learning Objective: To make the students familiar with AI techniques and its application to their area of study

IX. Detailed Course Content:

Module1: Introduction to AI techniques: Introduction to artificial intelligence systems– Humans and Computers – Knowledge representation – Learning process – Learning tasks – Methods of AI techniques, Classification vs. Regression	4 H
Module2: Neural Networks: Organization of the Brain – Biological Neuron – Biological and Artificial neuron Models, MC Culloch-pitts neuron model, Activation functions, Learning rules, neural network architectures- Single-layer feed-forward networks:– Perceptron, Learning algorithm for perceptron-limitations of Perceptron model	12 H
Module3: ANN paradigm: Multi-layer feed-forward network (based on Back propagation algorithm)– Radial-basis function networks- Recurrent networks (Hopfield networks).	5 H
Module4: Learning and robotics: Reinforcement learning, Deep Neural Networks and its application in AI problems.	5 H
Module5: Classical and Fuzzy Sets: Introduction to classical sets – properties – Operations and relations – Fuzzy sets –Membership – Uncertainty – Operations – Properties – Fuzzy relations – Cardinalities – Membership functions.	8 H
Module6: Fuzzy Logic System Components: Fuzzification – Membership value assignment – Developm of rule base and decision making system – Defuzzification to crisp sets – Defuzzification methods – B hybrid system.	

Text/Reference books:

1. Neural Networks. Algorithms, Applications and programming Techniques by James A. Freeman, David M. Skapura.
2. Neural Networks, Fuzzy logic, Genetic algorithms: synthesis and applications by S.Rajasekaran and G.A. Vijayalakshmi Pai – PHI Publication.
3. T. J. Ross, 'Fuzzy Logic with Engineering Applications', Tata McGraw Hill. 1997.
4. Simon Haykin, 'Neural Networks', Pearson Education, 2003
5. J. M. Zurada, 'Introduction to Artificial Neural Systems', Jaico Publishing home, 2002.
6. Introduction to Neural Networks using MATLAB 6.0 by S N Sivanandam, S Sumathi, S N Deepa TMGH

Signature of the proposer (s): Dr. Irshad Ahmad Ansari, Assistant Professor, ECE, PDPM IIITDMJ

Recommendation of the Head
(With recommendation from discipline/specialization/Programme)

1. Number of credits inline with the Institute policy: Yes / No
2. The course may also be offered to: _UG/PG_ Disciplines/Programmes
3. Portion of contents repeated: ~ 50%.   The
4. Course is assigned __EC 661__ number
5. Any other point:

Kindly provide ?
q. portion repeated?

new course may be replaced by the old one with the sugessted changes.

(Head, _____ 30/9/19 Discipline)

Recommendation of the APCS

Recommended/Not recommended

(Member1)   (Member2)   (Member3)   (Member4)   (Member5)   (Convener)

Old course to be replaced by new course.

Dean Academic

Approved/ Not Approved

Chairperson Senate

3

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for a new course/Modification in a course

I. Course Title: Mesh Free Construction and Programming
II. Proposed Course Number:
III. Units: Lecture 2 .   Tutorial 0   Lab 0   Credit 2
IV. Mode: core/Elective/EMF: EMF
V. Evaluation Scheme: Quiz (40%), End Semester Examination (60%)
VI. Semester: PG open to UG
VII. Programme: BTech, MTech, PhD
VIII. Learning Objective: Many engineering applications ended with differential equations whose solution needs a structured grid based approach. This type of computations are compute intensive and also require large amount of memory. The proposed course will enable the students to solve the differentials equation and other construct by using grid less/ mesh free approaches. This will reduce the time complexity for the solutions approaches.

IX. Detailed Course Content:

Module1: Defining mesh free methods, need for mesh free methods, idea of mesh free methods	05 H
Module2: Mesh free method Procedure	05 H
Module3: Mesh Free shape function Construction	05 H
Module4: Mesh free methods for engineering problems	05 H

Text books:
1. G R Liu, "Mesh Free Methods: Moving Beyond the Finite Element Method", CRC Press, ISBN-13: 978-1420082098

Reference books:

1. Hua Li, S S Mulay, "Mesh Less Methods and their Numerical Properties", CRC]
2. G R Lui, Y T Gu "An Introduction to mesh free methods and their programming",
3. G E Fasshauer "Mesh Free Approximation Methods with MATLAB ", World Scientific Publishing, 2007
4. W Chen, Z J Fu, C S Chen, "Recent advances in radial basis function collocation methods", Springer, 2014

Signature of the proposer (s):

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PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Recommendation of the Head
(With recommendation from discipline/specialization/Programme)

1. Number of credits inline with the Institute policy: Yes / No

2. The course may also be offered to: _____ Disciplines/Programmes

3. Portion of contents repeated: NIL
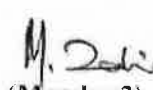
4. Course is assigned _____ number

5. Any other point:

   EM 601

(Head, _____ Discipline)   18/10/18

Recommendation of the APCS

Recommended/Not recommended

(Member1)   (Member2)   (Member3)   (Member4)   (Member5)   (Convener)

18-11-2018

Dean Academic

Approved/ Not Approved

Chairperson Senate

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for a new course

I.   Course Title: **STUDY OF DYNAMICAL SYSTEMS via BIOCONVECTION**
II. Proposed Course Number: NS-406 (e)
III. Units: Lecture 03   Tutorial 0   Lab 0   Credit 4
IV. Mode: core/Elective/EMF: Elective
V.   Evaluation Scheme: Quiz-10%, Mid-Sem-20%, End-Sem-40%, Project etc.-30%
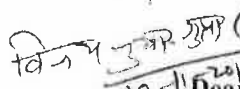VI. Semester: 1st/2nd Semester
VII. Programme: PhD
VIII. Learning Objective: BIO-TECHNOLOGICAL APPLICATIONS via BIOCONVECTION
IX. Detailed Course Content:

Module1: Review of Some Linear Algebra: Vector and Vector Spaces, Matrices, Determinant Functions, Matrix Inversion and Applications, Eigenvalues and Eigenvectors, Quadratic Forms, Diagonalization of Matrices, Jordan Canonical Form, Idempotent Matrices and Projection.	10 H
Module2: First Order Differential Equations Systems: Introduction, Constant Coefficient Linear Differential Equation (ODE) Systems, Jordan Canonical Form of ODE Systems, Reduction to First Order of ODE Systems, Fundamental Matrix, Stability Conditions of ODE Systems, Qualitative Solution: Phase Portrait Diagrams.	!0 H
Module3: Bioconvection – what goes up must come down: Motion through fluids at high and low Reynolds numbers, Low Reynolds number swimming, Introduction to Bioconvection, Governing System for Bioconvection, Bioconvection With Phototaxis, Bioconvection With Gyrotaxis. Bioconvection With Photo-Gyrotaxis.	10 H
Module4: Bioconvective Instability: Onset of Bioconvection due to Phototaxis, Onset of Bioconvection due to Gyrotaxis, Onset of Bioconvection due to Photo-Gyrotaxis, Weakly Non-linear Analysis on Bioconvection due to Phototaxis, Weakly Non-linear Analysis on Bioconvection due to Photo-Gyrotaxis, Fully-Nonlinear Analysis on Photo/Gyro/Photo-Gyrotactic Bioconvection in Two/Three Dimensions: Stream Function-Vorticity Approach, Primitive Variables Approach etc.	10 H

Text/Reference books:
1. Roger A. Horn & Charles R. Johnson: Matrix Analysis, Cambridge University Press, 2 edition, 2012.
2. Pierre N. V. Tu: Dynamical Systems: An Introduction with Applications in Economics and Biology, Springer; 2nd edition, 1994.
3. P. G.Drazin & W. H. Reid: Hydrodynamic Stability, Cambridge University Press, 2 edition, 2004.

Signature of the proposer (s): Manoj kumar Paul   26-08-2019

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PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Recommendation of the Head
(With recommendation from discipline/specialization/Programme)

1. Number of credits inline with the Institute policy; Yes / No
2. The course may also be offered to: __All__ Disciplines/Programmes
3. Portion of contents repeated: __2 % from NS-103__
   (complex Analysis
   + Linear Algebra)
4. Course is assigned __NS406 (c)__ number
5. Any other point:

% age of portion repeated?
18-11-2019

(Head, _____ Discipline)

Recommendation of the APCS

Recommended/Not recommended

(Member1) (Member2) (Member3) (Member4) (Member5) (Convener)

Dean Academic
18-11-2019

20-11-2019

Approved/ Not Approved

Chairperson Senate

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PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for a new course

I. **Course Title:** Materials Characterization

II. **Proposed Course Number:** PHY – 615

III. **Units:** 4   **Lecture** 42   **Tutorial** 0   **Lab** 14   **Credit** 4

IV. **Mode: core/Elective/EMF:** Elective

V. **Evaluation Scheme:** Quiz I (10%), Mid Sem Exam (20%), Quiz II (10%), End Sem Exam (40), Lab (20%)

VI. **Semester:** 1st and 2nd

VII. **Programme:** M. Tech., Ph. D.

VIII. **Learning Objectives:**

1. To understand the basics physics and operation mechanism of some of the important materials characterization techniques.

2. To develop analytical and interpretation skills about physical properties of surface, interfaces and thin films.

3. To be able to identify suitable techniques for specific materials characterization.

4. To get hands-on training on some of the materials characterization techniques.

IX. Detailed Course Content:

Module 1: X Ray diffraction and their applications Production and properties of X-ray, diffraction of X-rays. X-ray diffraction intensities, factors affecting intensity, structure factor calculations for simple, body centered, face centered, diamond cubic and hexagonal crystal structures. Working principles of diffractometer, counters and cameras. Indexing of XRD patterns.	10 H
Module 2: Microscopes Scanning electron microscope; construction, interaction of electrons with matter, modes of operation, image formation of plane and fractured surfaces. Energy dispersive x-ray analysis. Construction and working principles of transmission electron microscopes, image formation, resolving power, magnification, depth of focus, elementary treatment of image contrasts, bright field and dark field images. Formation of selected area diffraction patterns, reciprocal lattice and, indexing of diffraction patterns, sample preparation techniques. Atomic force microscope: working mechanism and modes of operations.	12 H
Module 3: Spectroscopic Techniques Fundamentals, operation mechanism and data analysis of IR spectroscopy, Raman spectroscopy, UV-Visible spectroscopy, Photoluminescence spectroscopy, Auger electron spectroscopy, and x-ray photoelectron spectroscopy.	10 H
Module 4: Compositional and Electrical Measurements Secondary ion mass spectroscopy and Rutherford backscattering spectroscopy. Electrical methods of thin film and interface characterization. Selection of characterization methods	10 H

2

Text/Reference books:

1. D. K. Schroeder, Semiconductor Material and Device Characterization, 3rd edition, Wiley-IEEE Press 2015, (ISBN: 978-0-471-73906-7).
2. S. Zhang, L. Li, and A. Kumar, Materials Characterization Techniques, CRC Press, 2008, (ISBN: 9781420042948).
3. B. D. Cullity and S. R. Stock, Elements of X-Ray Diffraction, 3rd edition, Prentice Hall, NJ , 2001 (ISBN: 978-0-132-31038-3).
4. Y. Leng, Materials Characterization: Introduction to Microscopic and Spectroscopic Methods, John Wiley & Sons, 2008, (ISBN: 978-0-470-82298-2).
5. S. Perkowitz, Optical CHaratcerization of Semiconductors: Infrared, Raman, and Photoluminescence Spectroscopy, Academic Press, 1993, (ISBN: 0-12-550770-4).

Signature of the proposer (s):

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Recommendation of the Head
(With recommendation from discipline/specialization/Programme)

1. Number of credits inline with the Institute policy: Yes / No
2. The course may also be offered to: __All__ Disciplines/Programmes
3. Portion of contents repeated: None
4. Course is assigned _PHY- 615_ number
5. Any other point:

(Head, 16/10/19 Discipline)

Recommendation of the APCS

Recommended/Not recommended

(Member1) (Member2) (Member3) (Member4) (Member5) (Convener)

18-11-2019

Dean Academic

Approved/ Not Approved

Chairperson Senate

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Course Title	:	Introduction to Bioengineering: Biology for Engineers			
Course Code ME	:	MG 693	Course Type	:	Elective
Contact Hours	:	L- 3 T- 0, P- 0	Credit	:	4
Program/Semester	:	B-Tech Mechanical (3rd Year) and M. Tech (1st year)			
Pre-requisites	:	None			
Evaluation Scheme	:	Quiz (20%), Mid-Term (30%), End-Term (50%)			
Course Details:					

1. Basics of Bioengineering: [6H]

Introduction to Bioengineering, Bioengineering fundamentals, Bioengineering: an engineer's perspective, Multidisciplinary approaches of Bioengineering, Bioengineering Applications

2. Cellular and Tissue Engineering: [10H]

Basic cell biology, cell-matrix interactions, receptor biology, cell culture, gene therapy and gene transfer techniques, protein and peptide engineering, stem cell programming, controlled release and drug delivery, tissue ablation, engineering angiogenesis, vascularization, material based immunotherapy and case studies involving skin, bone, liver, muscle tissue engineering.

3. Drug Delivery: [8H]

Fundamentals of drug delivery, including physiology, pharmacokinetics, drug diffusion and permeation through biological barriers; Various types of drug and gene delivery routes including oral, transdermal, implantable, targeted and pulmonary; Controlled drug delivery, biomaterials used in drug delivery, particle targeting via receptor-ligand interactions, intracellular transport of colloidal particles, protein and peptide delivery, synthetic gene delivery vectors; Case studies of current pharmaceutical products.

4. Biomaterials in Engineering Design: [8H]

Knowledge of biomaterial requirements for certain medical applications (e.g., biomaterials to be used in a joint versus a blood vessel). Familiarity of biomaterials used in different medical applications (e.g., soft and hard tissue replacements, cardiovascular, drug delivery, biosensors, and tissue engineering). Ability to apply fundamental principles for designing biomaterials to be used in a given medical application. Familiarity with legal and ethical issues related to biomaterials used in medical applications

5. Nanomaterials in healthcare: Nanomedicine [10H]

Concept of nanomedicine, Rationale for designing of nanomedicine, Materials for preparation of nanomedicine, Different structures of nanomedicine, Basic concept of nanotechnology in imaging, Different nanomaterials for imaging and diagnosis, Applications of nanomaterials in MRI, computed tomography and image guided disease treatment,

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Preclinical and clinical considerations of nanomedicine, Overview of current clinical nanomedicine, Regulations of nanomedicine for human health.

* The number of lectures/lecture hour mentioned against each chapter is tentative and could be the maximum hour that can be taken for completion of the same chapter.

References:
1. Comprehensive structural integrity, Vol.9: Bioengineering Editors: Mithe,Ritchie and Karihalo, Elsevier Academic Press, 2003.
2. Introduction to Novel Drug Delivery Systems By N.K. Jain
3. BD Ratner, AS Hoffman, FJ Schoen, JE Lemons (Eds), Biomaterials Science: An Introduction to Materials in Medicine, Academic Press, 2nd Edition, 2004.
4. The Clinical Nanomedicine Handbook. By Sara Brenner, CRC Press

Signature of the proposer (s):

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Recommendation of the Head
(With recommendation from discipline/specialization/Programme)

1. Number of credits inline with the Institute policy: Yes /No-
2. The course may also be offered to: _____All_____ Disciplines/Programmes
3. Portion of contents repeated: Not much
4. Course is assigned _ME 693_ number
5. Any other point:

(Head, _____05-11-2019_____ Discipline)

PUNEET TANDON

Recommendation of the APCS

Recommended/Not recommended

(Member1)　(Member2)　(Member3)　(Member4)　(Member5)　(Convener)

27.11.19　3/12/19

Dean Academic

Approved/ Not Approved

Chairperson Senate

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PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for a new course

I. Course Title: **Topology with applications**

II. Proposed Course Number: MTH-672

III. Units: Lecture : 03 (per week) Tutorial: 0   Lab: 0   Credit:4

IV. Mode: Elective

V. Evaluation Scheme: Quiz I-15%, Mid-Sem-30%, Quiz-II-15%, End-Sem-40%

VI. Semester: Any.

VII. Programme: **Ph.D.**

VIII. Learning Objective: The objective of the course on Topology is to provide the knowledge of Topological Spaces and their importance. To acquaint students with the concept of Homeomorphism and the topological properties and important mathematical concepts, so that students may learn and appreciate the nature of abstract Mathematics.

IX. Detailed Course Content:

Introduction topological spaces, closed sets, closure, dense subsets, neighborhoods, interior, exterior and boundary, accumulation points and derived sets, bases and subbases, subspaces and relative topology, alternative methods of defining a Topology in terms of Kuratowski closure operator and neighborhood systems.	10
Open mappings and closed mappings, continues functions and homomorphism's, compactness and local compactness, one-point compactification, connected and arc-wise connected spaces, components and locally connected spaces.	08
T0 and T1 spaces, T2 spaces and sequences, Hausdorffness of one-point compactification, axioms of countability and seperability, equivalence of separable, second axiom and Lindel of properties in a metric spaces, equivalence of compact and countably compact sets in metric spaces.	08
Regular and completely regular, normal and completely normal spaces, metric spaces as T2, completely normal and first axiom spaces, Urysohn's Lemma, Tietze Extension Theorem.	08
History of Chaos, examples, notions of Chaos. Identification spaces and compactness, Cantor sets, application of compact sets in population dynamics and fractals, manifolds, triangulations, application of manifold in robotic coordination and configuration spaces, geometry of manifolds, the topology of the universe, the topological degree axiomatic definition of the Brouwer degree, application of the Brouwer degree, Brouwer theorem, application of topological degree in fixed point theory.	08

Text/Reference Books

1. J. R. Munkres, Topology: a first course, Prentice-Hall of India Ltd., New Delhi, 2000.
2. J. L. Kelley, General Topology, Springer Verlag, New York, 1990.
3. G. F. Simmons, Introduction to topology and Modern Analysis, McGraw Hill Publications, 2017.
4. William F. Basener, Topology and its applications, Wiley-InterScience, 1973.
5. C. Robinson, Dynamical Systems, Stability, Symbolic Dynamics and Chaos, CRC Press, 1995.

Signature of Proposer 30/09/19 (Dr. Deepmala)

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Recommendation of the Head
(With recommendation from discipline/specialization/Programme)

1. Number of credits inline with the Institute policy: Yes / No
2. The course may also be offered to: **All.** Disciplines/Programmes
3. Portion of contents repeated: (5%) (Five)
4. Course is assigned MTH – 612 number
5. Any other point:

% age of course
repeated निरंजन 18-11-2019

Subir Singh

(Head, _____ Discipline)

Recommendation of the APCS

Recommended/Not recommended

(Member1) 22/10/19   (Member2)   (Member3)   (Member4)   (Member5)   (Convener)

निरंजन उमर सिंह
22-11-2019

Dean Academic

Approved/ Not Approved

Chairperson Senate

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Proposed Dual Degree (M.Tech. + Ph.D.) Programme

The salient features of the Dual (M Tech + Ph D) Degree programme are as follows:

1. Students shall be admitted only under 'regular category. A **regular** category student will have to work <u>full-time</u> for his/her Dual (MTech+PhD) degree programme. He/she receives assistantship from the Institute or any other recognized funding agency, as per prevailing norms.

2. *Eligibility:* B.E/B.Tech in the concerned discipline with:
   a. a CPI of 7.0 or marks of 65%, if the qualifying B E/B Tech degree is not from an Institute of National Importance

   b. a CPI of 7.0, if the qualifying B Tech degree is from an Institute of National Importance

   The candidate must have a valid GATE score.

3. *Assistantship:* Assistantship will be provided as per rules.

4. Such candidates will be considered equivalent to the direct admission to Ph.D, after B.E./B.Tech. and are required to fulfil academic requirements for the award of dual degree.

5. *Duration of the programme:* Minimum 3 years, and maximum 7 years from the date of admission.

6. **Comprehensive Examination:** After successful completion of his/her course works, the student concerned will also have to pass the Comprehensive Examination but before his/her completion of the second year in the programme.

7. *Award of the degree:* After successful completion of the Viva Voce relating to his/her thesis works, the student concerned will be awarded **the M Tech and Ph D degrees together.** The M Tech degree will be retroactive from the date of the completion of his/her Comprehensive Examination.

8. *Non-satisfactory performance:* At any time after successful completion of the Comprehensive Examination and SOAS by the student concerned, should the Research Progress Committee feel that the progress of the student is not satisfactory, it may recommend termination of the student from the programme. In that case, the student concerned will receive just the M Tech degree and leave the programme assuming yearly progress report as M Tech thesis work; and the M Tech degree will be effective from the date of leaving the programme.

Proposal for Personality Development Courses

(Undergraduate Students)

Personality Development Program for undergraduate students of IIITDM Jabalpur is proposed in the form of courses on Personality Development with the modalities given below:

1. BTech/BDes students are supposed to take a two credit course in each of their first three years of their undergraduate program. Entire batch would be divided into two groups. One group would do this course in the odd and the other would do it in the even semester.

2. In the seventh semester, there will be workshops/sessions on stress management, programming skills, current affairs and company specific preparations, etc.

3. Each course will be of 20 hrs duration and 2 credits.

4. These courses will be conducted in batches and preferred strength of each batch would be 60 students.

5. Each Session shall be for minimum 60 to 90 minutes in a day. All courses shall include practice sessions. Students shall be encouraged for presentations.

6. These courses shall be offered by experts from outside. Instructors will monitor the performance of the students and individual feedback will be provided for every student. Instructors will also be responsible for providing detailed performance analysis of each student to Dean Academic, Head of the discipline, and Chairperson, Placement Cell.

7. Relevant course material shall be provided by the instructors.

Year 1: Course 1: Personal Empowerment (Credits - 02)

The course will be offered for the students in Sem I and Sem II. It includes the following modules:

(A). Self-assessment to discover one's Strengths and weaknesses, Areas of Improvements and Personality Profile.

(B). Effective Communication Skills
- Word Power enhancement
- Attention to Detail: spacing, punctuation, spelling, and other finer aspects
- Verbal and non-verbal communication skills
- Getting rid of inhibitions and building confidence
- Assertive and Submissive communication
- Using Language for Convincing and Persuasion

- Art of asking Questions
- Practice sessions

(C). Personal Grooming, Formal Dressing and Body Language
- Basics of Power Dressing
- Corporate Dress Code
- Importance of Self Grooming and Personal Hygiene
- Gestures & Postures, Tone of Voice, Voice Modulation
- Workplace Etiquette & Culture
- How to introduce yourself

Year 2: Course 2: Aptitude Enhancement (Credits - 02)

This course will be run for the students in Sem III and Sem IV. It includes the following modules:

(A). Reasoning Aptitude
- Syllogisms / Deductions
- Analytical Reasoning
- Logical Reasoning
- Data interpretation
- Clocks & Calendars
- Different patterns of puzzles – Quantitative
- Data arrangement, analysis and critical reasoning
- Data sufficiency
- Coding Decoding and all others.

(B). Quantitative Aptitude
- Vedic Maths
- Concepts and Problem solving for time, speed, and distance; percentage; profit/loss, and discount; age problems, number properties; ratio and proportion; mixtures and solutions; time and work etc.
- Concepts and Problem solving for permutation and combination; probability; geometry; number series; word problem etc.

(C). Verbal Aptitude
- General grammar rules
- Comprehension and logic questions
- Concept building - reading comprehension, vocabulary building, confusing words, suitable words, verbal analogy, spotting errors in sentences etc.
- Advance reading comprehension
- Passage analysis
- Vocabulary testing
- Jumbled sentences

- Sentence improvisation

(D). Preparation for Psychometric Tests and Story Building Concepts

Year 3: Course 3: GD and Interview preparation (Credits - 02)

This course will run for students in Sem V and Sem VI. It includes the following modules:

(A). Preparing an Effective Resume/Portfolio
- Highlighting strengths and proven delivery capabilities
- Learning from Shared Sample resumes from industry
- Customize your resume as per the company's requirement
- Portfolio design with industry experts

(B). Basics of Public Speaking
- DOs and DONTs
- Meet and Talk Online
- Powerful Phone Talk
- Presentation Skills – Time to Shine
- Professional Emails writing

(C). Group Discussions
- How to conduct yourself in a GD
- Attitude and Communication skills & Analysis
- Points to remember- Attitude, Communication Skills, Analysis and Knowledge
- How To Present Your Point
- Body Language To Be Taken Care
- Voice Modulation & Tone While Sharing Your View
- Interpersonal Skills
- Team Working Skills
- Leadership Skills
- Mock Sessions

(D). Interview Preparation
- Behavioral, Standard, and Stress Interviews
- Responses to Frequently Asked Questions during interview with Human Resource Department
- Demonstrating strengths to suit the HR requirements
- Questions to ask any recruiter
- How to impress the interview panel?
- How to prove yourself in an interview as ethical/loyal to an organization?
- Dealing with, Confidential Information and Conflicts of Interest

- How to make your point heard?
- How to market yourself at interview?
- **Preparation for Telephonic Round of interview**
  - Telephonic Interview
  - Tele- Etiquettes
  - Effective Telephonic Techniques
- Mock Sessions

Year 4: Workshops and Sessions (Non-Credit)

These workshops will be offered for students in their Seventh Semester of undergraduate program. It includes:

- Technical Workshops on programming skills
- Workshops on stress Management
- Workshops on current affairs
- Sessions on company specific preparations

Proposal for Personality Development Course

(Graduate Students)

Personality Development Program for graduate students of IIITDM Jabalpur is proposed in terms of courses on Personality Development with the modalities given below:

1. MTech/MDes students are supposed to take two 2-credit courses in the first two semesters of their graduate program.

2. In the third semester, there will be workshops/sessions on stress management, programming skills, current affairs and company specific preparations etc.

3. Each course will be of 25 hrs duration.

4. These courses will be conducted in a batch for all graduate students of the institute.

5. Each Session shall be for minimum 60 to 90 minutes in a day. All courses shall include practice sessions. Students shall be encouraged for presentations.

6. These courses shall be offered by experts from outside. Instructors will monitor the performance of the students and individual feedback will be provided for every student. Instructors will also be responsible for providing detailed performance analysis of each student to Dean Academic, Head of the discipline, and Chairperson, Placement Cell.

7. Relevant course material shall be provided by the instructors.

Semester 1: Course 1: Personal Empowerment (Credits - 02)

The course will run for students in Sem I. It includes the following modules:

(A). Self-assessment to discover one's Strengths and weaknesses, Areas of Improvements and Personality Profile.
(B). Effective Communication Skills
(C). Personal Grooming, Formal Dressing and Body Language
(E). Reasoning and Quantitative Aptitude

Semester 2: Course 2: Strengthen Yourself (Credits - 02)

This course will run for students in Sem II. It includes the following modules:

(F). Verbal Aptitude
(G). Preparation for Psychometric Tests and Story Building Concepts
(H). Preparing an Effective Resume/Portfolio
(I). Basics of Public Speaking
(J). Preparation for Group Discussions
(K). Interview Preparation

Semester 3: Workshops and Sessions (Non-Credit)

These workshops will be offered for students in the Third Semester of their graduate program. It includes:

- Technical Workshops on programming skills
- Workshops on stress Management
- Workshops on current affairs
- Sessions on company specific preparations

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Design & Manufacturing Jabalpur

NOTE – I

IIITDMJ/RO/Senate/2019
October 23, 2019

Sub: Forwarding of comments of Senate members on the agenda forwarded for
         resolution through circulation.

The under-mentioned agenda for resolution by circulation was circulated among the
Senate members:

*"Currently, DS302 Engineering Design runs in the fifth semester which contains the
theory part and course project inclusive of Design and Fabrication. It is difficult for the
students to complete both the design and fabrication stages of the project in a
semester. It is proposed to split the project in two stages. In the 5th semester, the
students will complete the design stage of the project with prototyping and in the 6th
semester, the students will fabricate the designed project. This will be 3 hours weekly
practical course with 2 credits course. It will be applicable from the current semester
and accordingly, the total credit required for the students will be 162 credits."*

The following Senate members have given their comments on the above mentioned
agenda which is placed opposite for your perusal and comments:

1.   Prof. Puneet Tandon
2.   Prof. Vijay Kumar Gupta
3.   Prof. Sushil Kumar
4.   Dr. Prashant Kumar Jain
5.   Dr. Prabin Kumar Padhy
6.   Dr. Subir Singh Lamba
7.   Dr. Prabir Mukhopadhyay

Submitted please.

(Swapnali D. Gadekar)
Acting Registrar & Secretary (Senate)

R-1781
23/10/19

1285
15/11/19

R-2057
18/11/19

1312
19/11/19

Prof. I/C (Academic)   Reply to queries attached.
विभाग अध्यक्ष
24/10/2019

Registrar
Prof./Incharge (Academic)
18/11/19

The course is already over in this semester. To be putup
as agenda in next senate so that it may be discussed
in details.   विभाग अध्यक्ष
19-11-2019

Registrar

IIITDMJ/RO/Senate/2019
October 14, 2019

To,

The Senate Member(s)
PDPM IIITDM Jabalpur

Subject: Resolution by circulation.

Respected Sir,

Send these comments to Dean (Acad) & Dutidp

The following agenda for resolution by circulation as forwarded by the Prof. I/c (Academic) - Prof. Vijay Kumar Gupta after the approval of the Competent Authority is presented before the Senate ad-verbatim:

"Currently, DS302 Engineering Design runs in the fifth semester which contains the theory part and course project inclusive of Design and Fabrication. It is difficult for the students to complete both the design and fabrication stages of the project in a semester. It is proposed to split the project in two stages. In the 5th semester, the students will complete the design stage of the project with prototyping and in the 6th semester, the students will fabricate the designed project. This will be 3 hours weekly practical course with 2 credits course. It will be applicable from the current semester and accordingly, the total credit required for the students will be 162 credits."

You are requested to kindly give your comments on the above agenda latest by October 21, 2019 for our further action please.

With regards,

(Swapnali D. Gadekar)
Acting Registrar & Secretary (Senate)

IIITDM
JABALPUR

Registrar IIITDMJ <registrar@iiitdmj.ac.in>

Agenda for Resolution by circulation.

Puneet Tandon <ptandon@iiitdmj.ac.in>   Thu, Oct 17, 2019 at 8:09 PM
To: Registrar IIITDMJ <registrar@iiitdmj.ac.in>
Cc: "dean.acad dean.acad" <dean.acad@iiitdmj.ac.in>

Dear Madam:

I feel this is a good idea but enhancing contact hours of 3 hours and one more contextual switch in the 6th semester may be a bit hectic for the students as they have to prepare for competitive exams and internship/ placement activities. Further, our credit requirements are more than stipulated and as in practise in most of the good institutions.

My suggestion is to replace one course in lieu of Fabrication Project.

With best regards
Puneet Tandon
[Quoted text hidden]

Sent from my iPhone

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IIITDM
JABALPUR

Registrar IIITDMJ <registrar@iiitdmj.ac.in>

Agenda for Resolution by circulation.

Vijay Kumar Gupta <vkgupta@iiitdmj.ac.in>   Tue, Oct 15, 2019 at 11:36 AM
To: registrar registrar <registrar@iiitdmj.ac.in>

I agree with the proposed agenda item.

Regards
Vijay Kumar Gupta
[Quoted text hidden]

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Registrar IIITDMJ <registrar@iiitdmj.ac.in>

Agenda for Resolution by circulation.

Prof Sushil <sk@iiml.ac.in>   Tue, Oct 15, 2019 at 2:49 PM
To: Registrar IIITDMJ <registrar@iiitdmj.ac.in>

Dear Ma'am,

I have gone through the attached document.

As I understand DS302 is being proposed to be split in two stages across two semesters.

But somethings are not clearly spelt out. Does it mean that the credit for this course are being increased?

Will it have an impact on increased course load in the following semester? Is the total credit load would "increase" to 162 credits ?

Hope that rest of the members are clear on this issue. In that case I would support the issue.

with regards

sushil

[Quoted text hidden]

--
Sushil Kumar, Ph.D.
Professor, Operations Management Area
Indian Institute of Management
I.I.M. Road
Lucknow-226 013 INDIA

Ph: +91-522-669 6634 (Off)
   +91-522-669 6546 (Res)
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   +91-522-273 4005

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Registrar IIITDMJ <registrar@iiitdmj.ac.in>

Agenda for Resolution by circulation.

Dr. Prashant K. Jain <pkjain@iiitdmj.ac.in>
To: Registrar IIITDMJ <registrar@iiitdmj.ac.in>

Tue, Oct 15, 2019 at 11:47 AM

Agreed

With thanks and regards

Dr. Prashant Kumar Jain
Associate Professor ME Discipline
PDPM Indian Institute of Information Technology,
Design and Manufacturing Jabalpur
Ph:0761-2794415(O), 9425800310 (M)
Email: pkjain@iiitdmj.ac.in, pkjain2006@gmail.com

कुछ लड़ाइयाँ हारने के लिये भी लड़ी जाना चाहिये !!!!

[Quoted text hidden]

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IIITDM
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Registrar IIITDMJ <registrar@iiitdmj.ac.in>

Agenda for Resolution by circulation.

prabin16 prabin16 <prabin16@iiitdmj.ac.in>   Tue, Oct 15, 2019 at 11:48 AM
To: Registrar IIITDMJ <registrar@iiitdmj.ac.in>

Dear Madam
If DS 302 will split and move to 6th semester for two credits, what will be the credits of DS 302 in 5th semester. It
is not clear.

Regards

Prabin
[Quoted text hidden]

--
Dr Prabin Kumar Padhy
Associate Professor, Dean Academic
PDPM Indian Institute of Information Technology Design and Manufacturing
Jabalpur, MP, India, Phone: +91 761 2794031
(An Institute established by MHRD, Govt. of India)

Email: dean.acad@iiitdmj.ac.in, prabin16@iiitdmj.ac.in

Website: www.iiitdmj.ac.in

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ᕗ)IIITDM
J A B A L P U R

Registrar IIITDMJ <registrar@iiitdmj.ac.in>

Agenda for Resolution by circulation.

subirs subirs <subirs@iiitdmj.ac.in>   Wed, Oct 16, 2019 at 11:35 AM
To: Registrar IIITDMJ <registrar@iiitdmj.ac.in>

This course was designed on principles which were never followed. As per my view, this course ran for close
to 10 years. But, I do not think we have even 30 project to showcase (Assuming best 3 every year). I found that
most projects were based on ideas which were impractical like...building a car, a washing machine etc. The
student could not even answer their advantage over the existing products in the market. All, they did was spend
money and make something.

Dr. Subir Singh Lamba
Assistant Professor (Natural Science) (Since 2006 to till date)
Indian Institute of Information Technology, Design & Manufacturing Jabalpur
(Institute of National Importance, established by MHRD, Govt. of India)
Dumna Airport Road, Jabalpur. 482 005 India.

[Quoted text hidden]

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JABALPUR

Registrar IIITDMJ <registrar@iiitdmj.ac.in>

Agenda for Resolution by circulation.

Prabir Mukhopadhyay <prabir@iiitdmj.ac.in>   Tue, Oct 15, 2019 at 2:25 PM
To: Registrar IIITDMJ <registrar@iiitdmj.ac.in>

Dear Mrs Gaedkar,
      The move to split the course Engineering Design in two parts is welcome and I support it.
However I have the following views:
1. This course could be offered jointly by all the Engineering and Design Discipline. Thus there should be one
faculty from every discipline and this should be made mandatory.

2. The course could be anchored by each discipline in succession(ME, ECE, CSE and Design).

Best Regards
Prabir Mukhopadhyay
[Quoted text hidden]
—

Prabir Mukhopadhyay, PhD
Associate Professor
Head:Design Discipline
PDPM-Indian Institute of Information Technology Design & Manufacturing Jabalpur
(An Institute of National Importance by an Act of The Parliament)
Dumna Airport Road, PO Khamaria
Jabalpur: 482005, M.P.
INDIA
Phone: +91-761-279 4310

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Indian Institute of Information Technology, Design & Manufacturing Jabalpur

Ratification of the approval of the Chairperson, Senate

Approval UG & PG Result

S. No	Particulars	Date of Approval	Remarks
1.	Approval of Result/Grades of Special Semester of 2016, 2017, 2018 B.Tech	05-09-2019	
2.	Approval of result of four Me students for the Semester II, 2018-19	30-09-2019	
3.	Approval of result of Summer Semester 2018-19 (ES101 course) for 4 number of students	21-11-2019	

Other Approval

S. No	Particulars	Date of Approval	Remarks
1.	Approval of makeup examination for students selected for JENESYS Programme	31-10-2019	
2.	Approval for category conversion of Ms. Garikimukku Reethika (Roll No. 1811008) CSE, M.Tech Tech regular to external	21-11-2019	
3.	Approval for category conversion of Mr. Bhaskar Awadhiya (Roll No. 1420262) ECE, Ph.D. Tech regular to external	03-12-2019	
4.	Approval for category conversion of Ms. Gargi Bhattacharya (Roll No. 1716603) Physics (NS), Ph.D. Tech regular to external	18-12-2019	
5.	Approval of Academic Calendar for Semester II, 2019-20 (Revised) & Semester I, 2020-21	20-12-2019	
6.	Approval of Course Drop/Permission due to Short attendance		
7.	List of students appeared in Makeup Exams Semester I, 2019-20		

PDPM

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY,
DESIGN & MANUFACTURING, JABALPUR

Date: September 5, 2019

Note

Sub: Approval of Result/Grades for B.Tech 2016, 2017 & 2018 Batch for Special Semester 2018-19.

The Result/Grades of students in B.Tech 2016, 2017 & 2018 Batch for CSE, ECE & ME has been prepared for Special Semester 2018-19.

The courses breakup courses are as follows:

Sl. No.	Course Code	Course Name	No. of students
1.	PR101	Project (Optional)	206
2.	PR201	Project (Optional)	240
3.	PR301	Project (Optional)	69

Put up for your kind perusal please.

(Simanta Kar Gupta)
Sr. Assistant

Assistant Registrar (Academic)

PIC (Acad) / Dean (A)

Forwarded and recommended for kind approval.

PIC (Acad)

4996
9/19

60

Note - 2

Dated: 30/09/2019

Sub: Reg. Result of 04 students of ME 203 course.

Grades of following four students who were involved in cheating case have been submitted by the Course Instructor of ME 203 Course. Their result for Semester II, 2018-19 and Special Semester 2018-19 have been prepared and placed opposite for your perusal, please.

1.	Tarvan Harkut	2017273
2.	Uttam Kumar	2017280
3.	Yash Shahare	2017298
4.	Abhsihek Meena	2017306

Submitted for your perusal and approval, please.

Simanta Kar Gupta
Sr Assistant

Assistant Registrar (Acad.)

PIC (A) / DReg (A)

forwarded for kind approval.

Chairperson Senate

PIC (Acad)

The end semester examination for the current semester is scheduled during November 18-23, 2019 as per the academic calendar. However, following special situation has been arisen:

1. Some of the 2nd and 3rd year students have their Swayam course Examination scheduled on November 17, 2019 at Bhopal or other places. As they have to go to Bhopal and appear for the Swayam course examination, it will be difficult for them to appear in the examination on November 18, 2019. Hence, it is proposed that their end semester examination can be scheduled on Sunday November 24, 2019 as a special case.

2. Some of the final year students have their CAT Examination scheduled on November 24, 2019 at Bhopal, Kanpur or other places. CAT is one of the prestigious examination for the students. Looking to their need, it is proposed that their end semester examination can be scheduled on Sunday November 17, 2019 as a special case.

3. Following, 10 students have been shortlisted for the JENESYS 2019. Their visit to Japan is scheduled during November 19-26, 2019:
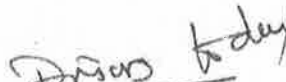
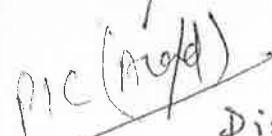| S.No.	Roll Number	Name	Current Sem and Discipline	Date of Birth (dd/mm/yyyy)
1.	2017344	Sakshi Sharma	VI Sem, CSE	17/03/1999
2.	2017160	Nikhil Jain	VI Sem, CSE	10/05/1998
3.	2017152	Muskan Srivastava	VI Sem, ECE	22/09/1998
4.	2017119	Karanam Hemachandran Gowri Ganesh	VI Sem, ECE	22/09/2000
5.	2017292	Vishal	VI Sem, ME	27/07/1998
6.	2017007	Abhishek Gupta	VI Sem, ME	21/10/1998
7.	2017351	Shubhiraj Singh	VI Sem, ME	12/12/1999
8.	2018161	Nayan Mathur	IV Sem CSE	30/10/1997
9.	2018068	Busi Vamshi Krishna	IV Sem ECE	07/07/2000
10.	2018295	Yash singh	IV Sem ME	01/12/2000

JENESYS is one of the important event conducted by Ministry of Foreign Affair, Japan, for the Institute Students in which they participate and know about the culture of Japan. As the visit is during the end semester examination period, these 10 students may be allowed to appear for end sem exam during the makeup examination period (i.e. December 02-04, 2019) – December 04, 2019 is not given in the academic calendar but they have to appear for 5 courses so it may be extended by another one day.

Submitted for kind approval as a special case.

विजय कुमार गुप्ता
30/10/2019
(Vijay Kumar Gupta)
Professor Incharge Academic

Chairperson Senate

PIC (Acad)

Discussed. Authorized PIC to taken appropriate decision. Kindly issue notification for 10+1 (Annexnal at Design) to allow them for appearing in makeup exam as a special case.

विजय कुमार गुप्ता

To
The Dean Academics
PDPM IIITDMJ

Subject: Regarding Grades of ES101 (summer course 2018-2019)

Dear Sir,

We have submitted the grades of ES101 on 25/07/2019. Due to printing mistake (paper type was selected as "letter" instead of "A4"), only 39 grades were submitted at that time, which should be 43.

The earlier submitted grades are correct and there is no change in that. The only issue is that 4 student's grades are missing in that list. So please find the attached grades of 4 students.
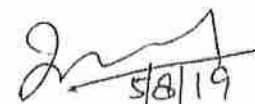
We request you to append these grades with earlier grade list as enclosed.

Enclosures:
1. Copy of earlier submitted grades (39 students)
2. Missing grades due to printing mistake (4 students)

Thanks and Regards

Dr. Biswajeet Mukherjee
Assistant Professor, ECE

Dr. Irshad Ahmad Ansari
Assistant Professor, ECE

Head ECE
For your comments please.
07/08/2019

AR(Acad)
Kindly notify.
14/08/2019

Recommended for Coordinator
8/8/19

Dean(A)
Following committee is proposed to scrutinize the case:
1. Dr. P.K. Padhy, Head ECE
2. Prof. P. Tandon, Head ME
3. Dr. Atul Gupta, Head CSE.
submitted for kind approval.
13/08/20

PIC (Academic)

Approved
A
10/08/19

63

It is discussed with the Instructor. The grades of four students could not be submitted due to oversight. The committee is recommended to consider the grades of the missing four students.

20/11/19

20/11/19

Forwarded for further process.

Dean(A)

20/11/19

forwarded and recommended for kind approval of grades for summer term of four students which were not submitted earlier.

विनय
21-11-2019

Chairperson/Senate

21/11/2019

PIC (A(g/d)

विनय उमार गुप्ता
22-11-2019

AR Accept

22/11/19

Mr. Simanta
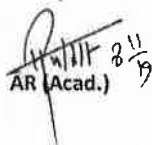
Note-1

Dated: November 8, 2019

Sub: Reg. Conversion of M.Tech. programme from regular to external category in case of Ms G Reethika.

A request has been received from Ms G Reethika (Roll No. 1811008), CSE discipline regarding conversion of her M.Tech. programme from regular to external category. Following have recommended and their remarks are as under.
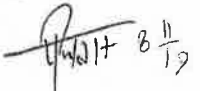
Thesis Supervisor:	Recommended and forwarded
Head of Discipline:	Recommended
Members of PGPC:	Recommended

(Sandeep Awasthi)
33

AR (Acad.)

PIC (Acad.)

Is there any from. If yes, ask recommendation in that. otherwise prepare a form for such recommendation/ approval for future.

08-11-2019

AR Acad

Mr. Sandeep Awasthi.

Recommendation in proper format has been received & same is attached for your perusal, Pls

AR (Acad)

PIC (A) forwarded and recommended.

21/11/19   21-11-2019

PIC (Acad)   22-11-2019
AR Acad

D.R. No. 370
Dt. 21.11.19

D.D. Nr 6232
Dt. 22/11/19

1334
21/11/19

65

Ph.D. Evaluation Report for Category Conversion

<u>To be filled by the student</u>

1. Discipline : ECE

2. Name of Research Scholar: Mr. / Ms. BHASKAR AWADHIYA.

3. Roll No.: 1420262

4. Theme of Doctoral work: Performance Analysis of Non Hysteric Negative capacitance Field Effect Transistor.

5. *Evaluation Date: 29/11/19   Time: 5:00   Place: VLSI LAB

6. Quantum of work done so far (Summarize briefly):

We have investigated performance of negative capacitance field effect transistor and resistive load inverter based NCFET. Negative DIBL/HDR and negative bulk coeff. are unique features seen in NCFET.

7. Future plan for the work to be carried out (Summarize here briefly)

We plan to implement concept of Negative capacitance in Fin & SOI based structure.
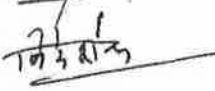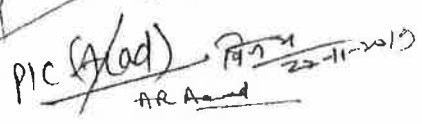
(Research scholar is required to submit a brief write up limited to 5-6 pages giving more details on point 6, 7 & 8 to the committee members at least two days prior to evaluation).

8. Number of Publications/Papers **presented/submitted** (attach separate sheet giving details as appropriate):   1.

9. Number of papers **published/ accepted** in journals/conference proceedings: ___7___

10. Number of papers presented in **conferences / meetings /workshops** (unpublished): _____

11. Number of papers submitted (under review): 0 .

(To be filled by DRPC)

12. Quantity of work done: Enough / Just Sufficient / Insufficient

13. Expected period for completion of programme: 1 year / 2 years / 3 years / 4 years.

14. Panel's Report / Recommendations/Description:

15. Comments/ suggestions   Open Seminar conducted on 5.11.2019

Signature: _____ _____

Name: (Prof. *P.N. Kondenkar*) (Prof. *D.P. Samajdar*)

Signature: _____ _____

Name: (Prof. *N·K· Jaiswal*) (Prof. *P.k. PADHY* 2/12/19)

Signature: _____ _____

Name: (Prof. _____) (Prof. _____)
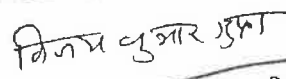
Date: 29/11/19

Forwarded and recommended.

विनय कुमार गुप्ता
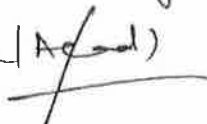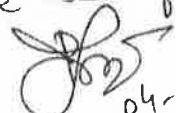
03-12-2019

Approved as proposed.

08/12/2019
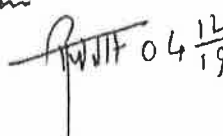
PIC (Head) — kindly do the needful

AR/A(-d)

04-12-2019

Shi Awasthi

04 12/19

PIC (Acad)

Date: 17/12/2019

To

The Dean (Academic)

PDPM - IIITDM Jabalpur

Dumna Airport Road, Jabalpur

(Through The Supervisor)

Recommended & forwarded.
'A' may be permitted also, as the
employer being HED, M.P.

17-12-2020

(P. Tamatan)
Offtg PIC (Acad)

Director / chairperson Senate

Subject: Regarding allowing me to join the allotted College and provide one month time to produce No Objection Certificate.

Put up rules

Aauy
17 May

Respected Sir,

With due respect I Gargi Bhattacharya (Doctoral Degree student of Natural Sciences Department, IIIrd Year) want to say that I got selected for the post of Assistant Professor (Physics) by Madhya Pradesh Higher Education Department.

I am applying for category conversion from Regular (PhD) to External-Self Supported. Since, it will take time to complete the procedure for External candidature since I need to produce a No objection certificate from the Higher Education Department (M.P.). In this connection kindly allow me to join the respective allotted College and to provide me one month time to produce the NOC. Also I request you disengage me by financial assistance ship provided by the Institute.

Kindly consider my application for which I will be grateful to you.

Forwarded & relevant
17/12/19

Yours Truly, *Bhattacharya*

Gargi Bhattacharya

Doctoral Degree Student (1716603)

Natural Sciences Department

Please find attached
*1. Extent rules attached (Flag *)*
2. Copy q Grade sheet
3. Application for Conversion q Category
4. Recommendation q RPC.

18-12-2019

Approved as per norms
Aauy
18/12/2019
chairperson, Senate

1517
17/12/19

1520
18/12/19

68

Note-1

Dt: 20-12-2019

Sub: Regarding Academic Calendar.

Revised Academic Calendar for Semester II, 2019-20 and Academic Calendar for Semester I, 2020-21 have been prepared and put up for your perusal.

Submitted for your perusal and orders, please.

20|12|19

(Sandeep Awasthi)
JS

20 ¹²/₁₉
Rizwan Ahmed
Assistant Registrar (Acad.)

Recommended for approval

20-12-2019

1542
20|12|19

PIC (A)

D/R

AR (Acad)

Puint 20 ¹²/₁₉

Shri Awasthi

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Academic Calendar Semester II 2019-20

Events		REVISED
Pre Registration	Oct 28 to Nov 01, 2019 (Mon-Fri)	Oct 28-Nov 01, 2019 (Mon-Fri)
Physical Reporting at the Institute	Dec 30, 2019 (Mon)	Jan 03, 2020 (Fri)/ Jan 04, 2020 (Sat)
Commencement of Classes	Dec 31, 2019 (Tue)	Jan 06, 2020 (Mon)
Late Physical reporting*	Jan 06, 2020 (Mon)	Jan 10, 2020 (Fri)
Last Date for Adding/Dropping of courses	Jan 06, 2020 (Mon)	Jan 13, 2020 (Mon)
Last Date for Document Submission (New Admissions)	Jan 31, 2020 (Fri)	Jan 31, 2020 (Fri)
Mid-Semester Examinations	Feb 16-22, 2020 (Mon- Sat)	Feb 17-21, 2020 (Mon-Fri)
Mid-Semester Recess	Mar 07-Mar 15, 2020 (Sat-Sun)	Mar 07-Mar 15, 2020 (Sat-Sun)
Last Date for showing mid semester answer sheets to students and display of compiled marks upto mid semester	Mar 17, 2020 (Tue)	Mar 23, 2020 (Mon)
Classes End	April 17, 2020 (Fri)	April 24, 2020 (Fri)
End-Semester Examinations	April 20-April 26, 2020 (Mon-Sun)	April 27-May 02, 2020 (Mon-Sat)
PG Presentations (Graduate/Research/Progress Seminars)	April 06-May 01, 2020(Mon-Fri)	April 07-May 12, 2020 (Tue-Tue)
Last Date for showing answer sheets to students and display of compiled marks (of the full semester)	April 30, 2020 (Wed)	May 06, 2020 (Wed)
Last Date of End Semester Grades Submission for courses	May 01, 2020 (Fri)	May 08, 2020 (Fri)
Make-up Examinations	May 4-5, 2020 (Mon- Tue)	May 11-13, 2020 (Mon-Wed)
Last Date for Grades Submission of Make-up Exams, Conversion of I Grades, Graduate/Research/Progress seminars	May 07, 2020 (Thur)	May 14, 2020 (Thu)
Submission of grade moderation report from discipline	May 8, 2020 (Fri)	May 15, 2020 (Fri)
Submission of modration report by APCS	May 12, 2020 (Tue)	May 19, 2020 (Tue)
Last date for Authentication of Grades	May 29, 2020 (Fri)	May 29, 2020 (Fri)
Academic Pre-Registration for next semester	April 06 to April 10, 2020 (Mon-Fri)	April 06-10, 2020 (Mon-Fri)
Vacation for UG students	April 26 - July 26, 2020 (Sun-Sun)	May 04-July 30, 2020 (Mon-Thu)
Vacational leave applicable for faculty	May 02- July 26, 2020 (Sat- Sun)	May 09-July 26, 2020 (Sat-Sun)

Late physical reporting is allowed only in exceptional cases with prior permission. Late reporting fee is Rs. 2000/-.

Academic Calendar Summer 2020

Events	
Course registration	May 16, 2020 (Sat)
Commencement of classes	May 18, 2020 (Mon)
Mid Semester Examination	June 19-20, 2020 (Fri-Sat)
Classes end	July 24, 2020 (Fri)
End Semester Examination	July 25-27, 2020 (Sat-Mon)
Last date of grades submission	July 29, 2020 (Wed)

Academic Calendar Semester I 2020-21

Events	Semester I, 2020- 2021
Pre-Registration	April 06-10, 2020 (Mon-Fri)
Physical Reporting at the Institute	July 27, 2020 (Mon) New UG & PG Students
	July 31, 2020 (Fri) All old UG & PG students
Orientation of new students	July 28-Aug 02, 2020 (Tue-Sun)
Commencement of Classes	Aug 03, 2020 (Mon)
Late physical reporting*	Aug 10, 2020 (Mon)
Last Date for Adding of courses	Aug 12, 2020 (Wed)
Last Date for dropping of courses	Sep 07, 2020 (Mon)
Last Date for Document Submission (New Admissions)	Sep 18, 2020 (Fri)
Mid-Semester Examinations	Sep 21-25, 2020 (Mon-Fri)
Mid-Semester Recess	Oct 24-Nov 01, 2020 (Sat-Sun)
Last Date for showing mid semester answer sheets to students and display of compiled marks upto mid semester	Oct 12, 2020 (Mon)
Classes End	Nov 20, 2020 (Fri)
End-Semester Examinations	Nov 23-28, 2020 (Mon-Sat)
PG Presentations (Graduate/Research/Progress Seminars)	Nov 09 - Dec 08, 2020 (Mon-Tue)
Last date for showing of End-Semester answer sheets to students and display of compiled marks (of the full semester)	Dec 03, 2020 (thu)
Last Date of End Semester Grades Submission for courses	Dec 04, 2020 (Fri)
Make-up Examinations	Dec 7-9, 2020 (Mon-Wed)
Last Date for Grades Submission of Make-up Exams, Conversion of I Grades, Graduate/Research/Progress Seminars	Dec 10, 2020 (Thu)
Submission of grade moderation report from discipline	Dec 11, 2020 (Fri)
Submission of moderation report by APCS	Dec 15, 2020 (Tue)
Last date for Authentication of Grades	Dec 24, 2020 (Thu)
Academic Pre-Registration for next semester	Nov 2-6, 2020 (Mon-Fri)
Vacation for UG students	Nov 30, 2020-Jan 02, 2021 (Mon-Sat)
Vacational leave applicable for faculty	Dec 5, 2020-Jan 02, 2021 (Sat-Sat)

'Late physical reporting is allowed only in exceptional cases with prior permission. Late reporting fee is Rs. 2000/-.

Permission/Course Drop due to Short of attendance

Course Code	Course Name	L-T-P-C-D	Offered By Discipline	Instructor	Total No. of register Students	<75%	Allowed	Course Drop	<60% Allowed	Course Drop
EC201	Electronics Devices and Circuits (3L+2P)	3-0-2-4	ECE	PNK+LAB(DPS+KKSP)	96	22	9	13	8	5
ME416a	Energy Conversion Device	3-0-0-4	ME	AM	48	18	13	5	5	0
CS531	Mathematical Foundations of Computer Science	3-0-0-4	CSE	AO	20	2	2	0	0	0
CS417d/CS685	Block Chain Tecnology	3-0-0-4	CSE	AO	32	4	4	0	0	0
CS418b	Data Mining and Data Warehousing	3-0-0-4	CSE	KKB	14	5	0	5	3	2
CS310b	Parallel Computing	2-0-0-2	CSE	MKB	103	42	22	20	17	3
MN201	Manufacturing Process (2L+2P)	2-0-2-4	ME	MZA+HSN+SPS(for lab)	277	56	34	22	17	5
CS201	DBMS	3-0-2-4	CSE	PK	101	10	6	4	3	1
DS213	Design Thinking (2L+2P)	2-0-2-4	DS	PT	22	4	3	1	0	1
ME601	Computer Aided Geometric Design	3-0-0-4	ME	PT	10	0	0	0	0	0
EC202	Instrumentation and Measurement	2-0-0-2	ECE	TK	87	17	16	1	1	0
ME308	Fluid Mechanics	3-1-0-4	ME	TS	88	44	32	12	5	7
ME310a	Steam Turbine	2-0-0-2	ME	TS+ External Faculty	91	29	15	14	8	5
EC310b	Digital System Design	2-0-0-2	ECE	VB	29	1	1	0	0	0
ME201	Kinematics and Dynamics of Machines	3-0-2-5	ME	VKG	91	19	15	4	4	0
ME631	Mechanical Vibrations and Condition Monitoring	3-0-0-4	ME	VKG	8	0	0	0	0	0
MT501	CONCEPTS IN MECHANICAL ENGINEERING	3-0-0-4	MT	VKG+SM	2	1	0	1	0	0
MT612	PLC and Micro-Controllers (Mechatronics course)	3-0-2-5	ME	VKG+TS	13	1	0	1	0	1

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List of Students for Make-UP Exam 2019-20

Sno	Roll Number	Name	No. of course	Disc	course Code	Course Name	Instructor Name	Reason
1	2019365	DIVYANSHI PAGARIYA	5	ME	NS101, NS102, HS101, ES101, ES102	Mathematics-I, Engineering Mechanics, Effective Communication Skills, Fundamental of Electrical & Electronics Engg, Fundamentals of Computing	Dr. Subir singh Lamba + Dr. Nihar Kumar Mahto, Dr. Mukesh Kumar Ray + Dr. Amaresh Chandra Mishra, Dr. Mamta Anand Dr. Trivesh Kumar + Dr. Ravi Panwar, Dr. Ayan Seal + Dr. Kusum Kumari Bharti	Due To medical reason (Typhoid)
2	2019151	SIDDHARTH RAMA SUSHIL	5	ME	NS101, NS102, HS101, ES101, ES102	Mathematics-I, Engineering Mechanics, Effective Communication Skills, Fundamental of Electrical & Electronics Engg, Fundamentals of Computing	Dr. Subir singh Lamba + Dr. Nihar Kumar Mahto, Dr. Mukesh Kumar Ray + Dr. Amaresh Chandra Mishra, Dr. Mamta Anand Dr. Trivesh Kumar + Dr. Ravi Panwar, Dr. Ayan Seal + Dr. Kusum Kumari Bharti	Due To medical reason (Chickenpox)
3	1913305	SOURAV MAJUMDAR	1	ME	ME621	Advance Mechanics of Solids	Dr. Shivdayal Patel	Sister's Wedding
4	2017237	SHASHWAT KUMAR	1	ECE	DS302	Engineering Design	Dr. Tripti Singh	Sister's Wedding
5	2018139	MANAN AGRAWAL	1	ECE	MN201	Manufacturing Process	Dr. Mohd. Zahid Ansari	Lost of Grandmother
6	2018067	BRIJESH KUMAR	5	CSE	CS201, CS202, MN201, ES204, NS205f	DBMS, OOPs with Java, Manufacturing Process, Degital Electronics, Optimization	Dr. Pritee Khanna, Dr. Atul Gupta, Dr. Mohd. Zahid Ansari+Dr. Himansu Sekhar Nanda+Dr. Saurabh Pratap, Dr. Dip Prakash Samajdar + Dr. Irsad Ahmed Ansari Dr. Deepmala	Left Arm bone got fractured
7	2017106	HEMANT KUMAR VERMA	6	CSE	DS302, CS307, CS308, CS309, CS310b, CS311L	Engineering Design, Computer Network, Operating System, Language Theory, Parallel Computing, CSE LAB	Dr. Tripti Singh, Dr. V K Jain, Dr. Manish Kumar Bajpayee, Dr. Sraban Kumar Mohanti, Dr. Manish Kumar Bajpayee Dr. V K Jain,	Permitted for Makeup exam as a special case on humanitarian grounds. (Young brother in hospital)
8	2017344	SAKSHI SHARMA	6	CSE	DS302, CS307, CS308, CS309, CS310b, CS311L	Engineering Design, Computer Network, Operating System, Language Theory, Parallel Computing, CSE LAB	Dr. Tripti Singh, Dr. V K Jain, Dr. Manish Kumar Bajpayee, Dr. Sraban Kumar Mohanti, Dr. Manish Kumar Bajpayee Dr. V K Jain,	JENESYS Program
9	2017160	NIKHIL JAIN	6	CSE	DS302, CS307, CS308, CS309, CS310b, CS311L	Engineering Design, Computer Network, Operating System, Language Theory, Parallel Computing, CSE LAB	Dr. Tripti Singh, Dr. V K Jain, Dr. Manish Kumar Bajpayee, Dr. Sraban Kumar Mohanti, Dr. Manish Kumar Bajpayee Dr. V K Jain,	JENESYS Program
10	2017152	MUSKAN SRIVASTAVA	6	ECE	DS302, EC307, EC308, EC309, EC310a, EC311L	Engineering Design, Fundamental of Electromagnetic Theory, Control Systems, Principle of Communication, Computer Network, Control Systems & Communication	Dr. Tripti Singh, Dr. Dinesh Kumar Vishwakarma, Dr. Prabin Kumar Padhy, Dr. Manoj Singh Parihar, Dr. Atul Kumar, Dr. Matadeen Bansal + Dr. Ravi Panwar,	JENESYS Program
11	2017119	KARANAM HEMACHANDRAN GOWRI GANESH	6	ECE	DS302, EC307, EC308, EC309, EC310b, EC311L	Engineering Design, Fundamental of Electromagnetic Theory, Control Systems, Principle of Communication, Digital System Design, Control Systems & Communication	Dr. Tripti Singh, Dr. Dinesh Kumar Vishwakarma, Dr. Prabin Kumar Padhy, Dr. Manoj Singh Parihar, Dr. Varun Bajaj, Dr. Matadeen Bansal + Dr. Ravi Panwar,	JENESYS Program

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Sno	Roll Number	Name	No. of course	Disc	course Code	Course Name	Instructor Name	Reason
12	2017292	VISHAL	6	ME	DS302, ME307, ME308, ME309, ME310a, ME311L	Engineering Design, Manufacturing Technology, Fluid Mechanics, Design of Mechanical Components, Steam Turbine, FM & ST	Dr. Tripti Singh, Dr. Harpreet Singh, Prof. Tanuja Sheoray, Dr. Shivdayal Patel, Prof. Tanuja Sheoray, Mr. Awadesh Kumar Singh,	JENESYS Program
13	2017007	ABHISHEK GUPTA	6	ME	DS302, ME307, ME308, ME309, ME310a, ME311L	Engineering Design, Manufacturing Technology, Fluid Mechanics, Design of Mechanical Components, Steam Turbine, FM & ST	Dr. Tripti Singh, Dr. Harpreet Singh, Prof. Tanuja Sheoray, Dr. Shivdayal Patel, Prof. Tanuja Sheoray, Mr. Awadesh Kumar Singh,	JENESYS Program
14	2017351	SHUBHIRAJ SINGH	6	ME	DS302, ME307, ME308, ME309, ME310a, ME311L	Engineering Design, Manufacturing Technology, Fluid Mechanics, Design of Mechanical Components, Steam Turbine, FM & ST	Dr. Tripti Singh, Dr. Harpreet Singh, Prof. Tanuja Sheoray, Dr. Shivdayal Patel, Prof. Tanuja Sheoray, Mr. Awadesh Kumar Singh,	JENESYS Program
15	2018161	NAYAN MATHUR	6	CSE	CS201, CS202, MN201, ES204, NS205f	DBMS, OOPs with Java, Manufacturing Process, Digital Electronics, Optimization	Dr. Pritee Khanna, Dr. Atul Gupta, Dr. Mohd. Zahid Ansari+Dr. Himansu Sekhar Nanda+Dr. Saurabh Pratap, Dr. Dip Prakash Samajdar + Dr. Irsad Ahmed Ansari Dr. Deepmala	JENESYS Program
16	2018068	BUSI VAMSHI KRISHNA	6	ECE	EC201, EC202, MN201, ES204, NS205f	Electronics Devices and Circuits, Instrumentation and Measurement, Manufacturing Process, Digital Electronics, Optimization	Prof. P N Kondekar, Dr. Trivesh Kumar, Dr. Mohd. Zahid Ansari+Dr. Himansu Sekhar Nanda+Dr. Saurabh Pratap, Dr. Dip Prakash Samajdar + Dr. Irsad Ahmed Ansari Dr. Deepmala	JENESYS Program
17	2018295	YASH SINGH	6	ME	ME201, ME202, MN201, ES204, NS205i	Kinematics and Dynamics of Machines, IT Workshop, Manufacturing Process, Digital Electronics, Culture and Science-a Comparison	Prof. Vijay Kumar Gupta, Mr. Awadesh Kumar Singh, Dr. Mohd. Zahid Ansari+Dr. Himansu Sekhar Nanda+Dr. Saurabh Pratap, Dr. Dip Prakash Samajdar + Dr. Irsad Ahmed Ansari Dr. Mamta Anand	JENESYS Program
18	2017506	AROMAL ASHOK	5	Design	DS302, DS323, DS324, DS325b, DS326	Engineering Design, Service Design, Sustainable Design, Visual Ergonomics, Design Project,	Dr. Tripti Singh, VF, VF, SP, GUIDE	JENESYS Program
19	2018205	RATNESH DUBEY	2	ECE	EC202	Instrumentation and Measurement	Dr. Trivesh Kumar	Helth condition not good (varified in PHC)
20	2018377	SIDDHARTH PARIHAR	1	ME	ES204	Digital Electronics,	Dr. Dip Prakash Samajdar + Dr. Irsad Ahmed Ansari	Not Given Extra Time in END Sem Exam
21	2017166	NITESH JADWANI	1		DS302	Engineering Design	Dr. Tripti Singh	Permitted on Humanitarian ground (serious health condition of his nrother)
22	2019021	ANIKET BAMOTRA	1	CSE	NS102	Engineering Mechanics,	Dr. Mukesh Kumar Ray + Dr. Amaresh Chandra Mishra,	Medical Issue
23	2019090	MOHD DANISH	1	CSE	ES102	Fundamentals of Computing	Dr. Ayan Seal + Dr. Kusum Kumari Bharti	Permitted for makeup on medical ground
24	2018358	RANIT MUKHERJEE	1	ECE	ES204	Digital Electronics,	Dr. Dip Prakash Samajdar + Dr. Irsad Ahmed Ansari	Permitted for makeup on medical ground

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