41st A Special Meeting of the Senate
to be held on September 11, 2018 at 12:00 am in the Conference Hall of the Institute

List of Annexures

001

Senate/41A/01	Overview Report of the Chairperson

Opening remarks will be made by Chairperson, Senate during the meeting.

Senate/41A/02	**Confirmation of Minutes of the 40th meeting of the Senate held on July 28, 2017.**

Minutes of the 40th meeting of the Senate were circulated to the members **Annexure I (Page 4-8)**. No comments have been received. The Senate is requested to confirm the Minutes.

Senate/41A/03	**Action taken report on the decision of the Senate vide 40th meeting of the Senate held on July 28, 2017.**

Action taken report on the 40th meeting of the Senate are as follows.

Sl no	Agenda Item	Action Taken
Senate/40/06	Appeal against Termination/Drop from UG & PG Programme	Implemented
Senate/40/07	PG Curriculum	Implemented

Senate/41A/04	**Recommending the names of the students for the award of the degree in the 10th Convocation**

List of students who have fulfilled all the requirements related to completion of degree will be placed in the **SENATE.** A summary of the same is as follows:

Programme/ Discipline	B.Tech.	M.Tech.	M.Des.	Ph.D.
Computer Science & Engineering	87	09	--	05
Electronics and Communication Engineering	81	--	--	08
Electronics and Communication Engineering (Microwave & Communication)	--	08	--	--
Electronics and Communication Engineering (Power & Control)	--	09	--	--
Electronics & Communication Engineering (Micro-Nano Electronics)	--	07	--	--
Mechanical Engineering	87	--	--	07
Mechanical Engineering (CAD-CAM)	--	08	--	--
Mechanical Engineering (Design)	--	09	--	--
Mechanical Engineering (Manufacturing)	--	08	--	--
Design			18	01
Mechatronics		08		
Total	**255**	**66**	**18**	**21**

Senate is requested to recommend the names of the students for the award of the degree to the Board.

Senate/41A/05	Recommending the names of the students for the award of various prizes and medals in the 10th convocation

Various committees have been formulated for deciding the prizes and medals to be awarded at the time of the 10th Convocation. Recommendation of the committees **will be placed in the SENATE**.

Sr. No.	Name of Prize	Programme	Name of Candidate	Roll No
1	Chairman's Gold Medal (CGM)	UG		
2	Director's Gold Medal (DGM)	UG / ME		
		PG /ECE		
3	D&M Proficiency Gold Medal	UG		
4	Academic Performance Proficiency Silver Medal	CSE (UG)		
		ECE (UG)		
		ME (UG)		
5	IIITDM Proficiency Prize	CSE (PG)		
		ECE (PG)		
		ME (PG)		
		Design (PG)		
		CSE(UG)		
		ECE(UG)		
		ME(UG)		
6	Director's Silver Medals	Cultural Activities		
		Games & Sports		

The Senate is requested to recommend the names to the Board of Governors.

Senate/41A/06	Master Programme in Signal Processing

Revised PG Curriculum for Semester-I, 2017-18. **(Annexure II (Page 9-39)**

Senate/41A/07	Ratification of approvals from Chairperson Senate

From time to time, approvals are accorded by the Chairperson Senate, for smooth running of the academics. A list of approvals is attached herewith as **Annexure III (Page 40-134).**

Senate is requested to rectify the approvals accorded by the Chairperson Senate.

Senate/41A/08	Any other item with the permission of the Chair

ANNEXURE -1

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

Minutes of the 40th Meeting of the Senate held on July 28, 2017 from 11:00 A.M. onwards in the Conference Hall of PDPM IIITDM Jabalpur.

Members present:

Prof. Pramod Kumar Jain	Chairperson
Prof. Puneet Tandon	Member
Prof. P. N. Kondekar	Member
Dr. Prashant Kumar Jain	Member
Dr. Prabin Kumar Padhy	Member
Prof. Vijay Kumar Gupta	Member
Dr. Pritee Khanna	Member
Dr. Dinesh Kumar Vishwakarma	Member
Dr. Prabir Mukhopadhyay	Member
Dr. Subir Singh Lamba	Member
Prof. Aparajita Ojha	Member
Prof. Tanuja Sheorey	Member
Prof. V. M. Gadre	Member
Dr. Debanik Roy	Member
Dr. S.C. Bose	Member
Smt. Swapnali D. Gadekar	Acting Registrar & Secretary

The following members expressed their inability to attend the meeting:

Prof. P.V. M. Rao
Prof. Amitabha Mukherjee

Senate/40/01	**Overview Report of the Chairperson**

The Chairperson, Senate welcomed all the Senate members and briefed about the 9th Convocation- 2017 scheduled to be held on 16th August 2017. The Chairperson informed that Dr. S. Christopher, Chairman DRDO will be the Chief Guest for this year's Convocation. He informed about various MoUs being signed with reputed entities like Smart City Lab, Germany, Chiba University, Japan. He further informed that the following new admissions have been made for the Semester – I, 2017-18:

(i) B.Tech - 258

(ii) B.Des. - 24

(iii) M.Des - 25

(iii) M.Tech - 73

(iv) Ph.D. - 12

Senate/40/02	Confirmation of Minutes of the 39th meeting of the Senate held on January 20, 2017.

The Minutes of the 39th meeting held on January 20, 2017 were circulated to all the members. No comments were received. The minutes were confirmed.

Senate/40/03	Action taken report on the decision of the Senate vide 39th meeting of the Senate held on January 20, 2017

Action Taken Report on the decision of 39th meeting of the Senate were placed before the Senate. The Senate noted the same.

Senate/40/04	Recommending the names of the students for the award of the degree in the 9th Convocation

The names of graduating students who have fulfilled the requirements related to the completion of the degree were placed before the Senate. A summary of the same is given below:

Programme/ Discipline	B.Tech.	M.Tech.	M.Des.	Ph.D.
Computer Science & Engineering	79	10	--	03
Electronics and Communication Engineering	52	--	--	08
Electronics and Communication Engineering (Microwave & Communication)	--	08	--	--
Electronics and Communication Engineering (Power & Control)	--	04	--	--
Electronics & Communication Engineering (Micro-Nano Electronics)	--	08	--	
Mechanical Engineering	85	01	--	02
Mechanical Engineering (CAD-CAM)	--	05	--	--
Mechanical Engineering (Design)	--	06	--	--
Mechanical Engineering (Manufacturing)	--	08	--	--
Design	--	--	25	--
Mechatronics	--	15	--	--
Total	**216**	**65**	**25**	**13**

The Senate recommended the names for the award of the degree to the Board of Governors for approval. The Senate authorized the Chairperson, Senate for the approval of additional

graduating students, if any. The list of students for award of degrees is placed as Annexure - I

Senate/40/05	Recommending the names of the students for the award of various Prizes and Medals in the 9th Convocation

The recommendations of the various committees for deciding the prizes and medals to be awarded to the graduating students were placed before the Senate. The Senate discussed the cases of 'None found suitable' and recommended that the respective committees may relook at the recommendations and submit the same for approval of the Chairperson, Senate.

The recommendations of the SPACS with the names of the students and medals to be awarded are appended below:

Sr. No.	Name of Prize	Programme	Name of Candidate	Roll No.
1.	Chairman's Gold Medal (CGM)	B.Tech/CSE	Shubham Gupta	2013198
2.	Director's Gold Medal (DGM)	B.Tech/ECE	Aditi Sharma	2013012
		PG	None found suitable	
3.	D&M Proficiency Gold Medal	B.TechME	Mayur Mishra	2013122
		PG	None found suitable	
4.	Academic Performance Proficiency Silver Medal	B.Tech/CSE	Shubham Gupta	2013198
		B.Tech/ECE	Aditi Sharma	2013012
		B.Tech/ME	Piyush Pandey	2013148
5.	IIITDM Proficiency Prize	M.Tech/CSE	Akhil Aishwarya Dwivedi	1510102
		PH.D/CSE	None Found Suitable	
		PH.D/ECE	Saurabh Kumar	1210266
		M.TECH/ECE	Pulimamidi Venkatesh	1510225
		PHD/ME	None Found Suitable	
		M.TECH/ME	None Found Suitable	
		Design (PG)	None Found Suitable	
		B.TECH/CSE	Somil Jain	2013208
		B.TECH/ECE	Aditi Sharma	2013012
		B.TECH/ME	Swapnil Shandilya	2013215
6.	Director's Silver Medals	Cultural Activities	Parantap Charabarti	2013145
		Games & Sports	Anuj Gulati	2013030

It was also discussed that the rules and regulations governing award of medals and prizes be revised. The Senate recommends the name of above mentioned students for the approval of the Board of Governors.

Senate/40/06	Appeal against termination/ drop from UG & PG programme

Total nine (09) appeals were received from the students who have come under academic probation due to inadequate performance in Semester – II 2016-17 and have requested to re-instate their academic programme. Out of 09 students, 03 students have withdrawn their appeal and took withdrawal from their academic programmes. The Senate discussed the matter and constituted the Committee to study the cases carefully and prepare case files to each student. The Senate authorized the Chairperson Senate to approve the cases recommended by the committee. The committee is as follows:

(i) Dean (Academic)
(ii) Head (Counseling Service)
(iii) All Discipline Heads

Senate/40/07	PG Curriculum

The proposed PG curriculum(ECE, ME, CSE, MT, NS) was presented before the Senate. The Senate approved the same with following suggestions:

- Revision of list of electives of each specialization
- Finalize the evaluation scheme to maintain consistency and transparency
- The fourth core in 1st semester of MTech programme is modified as core/elective.

All Head of the discipline shall incorporate suggested changes and submit by 31st July 2017.

Senate/40/08	Ratification of approvals from Chairperson Senate

The approvals given by the Chairperson, Senate were placed before the Senate. The Senate ratified the same.

Senate/40/09	Any other item with the permission of the Chair

(i). The request of two students namely Mr. Jadhav Akash Naik, Roll no. 2013091 (ME) and Mr.T. Gokul Bhardwaj, Roll no. 2013220 (ME) have been accepted by the Senate to register the backlog courses in next semester and they are allowed to drop the current semester.

(ii). Ms. Shivani Gupta Ph.D student has completed six years and completed her open seminar. She has requested extension of programme to submit the thesis. Senate extended her programme for one semester and she shall register for the current semester. The supervisor is requested to convey specific recommendation regarding her submission of thesis within extended period and ensure her thesis submission within the extended period.

(iii). The summer result of BTech 2014 to 2016 batch was placed in the Senate and Senate has approved the same.

(iv). Mr. Sunil Pandey had applied to convert his PhD programme from regular to external. The senate has approved the same.

(v). Mr. Vasu, a PhD student, completed his 6 years in the Institute, due to his medical problem, he has requested to extend his programme. The Senate extended his programme for one year. The supervisor of the student has to give specific recommendation about the satisfactory progress of the student so far and the student would be able to submit his thesis during the extended period.

The meeting ended with thanks to the Chair.

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

6/8/17

Prof. Pramod Kumar Jain
Chairperson, Senate

ANNEXURE-5

Date: 21-02-2018

To

The Dean, Academics
PDPM-Indian Institute of Information Technology
Design & Manufacturing Jabalpur

Subject: Proposal for starting new M.Tech Specialization in ECE (M.Tech in Signal processing)

Through: Head, ECE

Dear Sir,

We (Dr. Anil Kumar, Dr. Varun Bajaj and Dr. Irshad Ahmad Ansari) want to start new M.Tech specialization in ECE discipline: M.Tech in Signal Processing. The detailed proposal of this M.Tech Specialization is forwarded for your kind perusal and to consider in the coming Senate Meeting. I shall be highly thankful to you for this obligation.

Yours Sincerely,

Dr. Anil Kumar

21/02/18
Dr. Irshad Ahmad Ansari

@bajaj
21-2-18
Dr. Varun Bajaj

Ref: mom of ECE Dept dated Feb 21, 2018
It is recommended to start new M. Tech program in Signal Processing with 12 seats.

The proposal may be put up in Senate for Approval.

23/02/18
(Head ECE)

23/2/18

Requested to give details as marked
Head ECE
24/2/18

19/5
23/2/18

Give in detail
Dr. Anil Kumar

To keep for senate

822
28/2/18

009

9

PDPM-IIIT DM Jabalpur

Course Details
and
Syllabus
For

M.Tech. in ECE (Signal Processing)

Proposal for M.Tech. ECE (Signal Processing)

Preamble:

Signal processing is the enabling technology for the generation, transformation, and interpretation of information. The program provides an advanced level of education in signal processing techniques and their application to communication, image and video processing, computer vision, biomedical signal processing, speech and audio processing areas. The program is aimed at providing a deeper understanding of the mathematical, theoretical, and practical aspects of signal processing area.

The students will be studying the theory and laboratory courses in the above mentioned categories during their first and second semesters. This will be followed by a research based project work spread across third and fourth semesters and is aimed at developing new signal processing methods and systems useful for communication, image, video, biomedical, speech and audio processing. Thus, the students get a deeper understanding in the signal processing area and also a training to carryout research work.

Motivation:

Signal processing is a domain of Engineering which analyzes, synthesize, modify, separate, enhance, and modify various audio, image, video, and communication signals. It forms, compresses and delivers entertainment, games, clever applications (translation, location, music ID, speech recognition, speech generation, bio-medical monitoring etc.). It enables, supports, and enhances interfaces between humans, between machines and between humans and machines. It is applied to electrical, and mechanical designs, and to control of power generation, power distribution, power optimization, navigation, guidance, air traffic control, commerce, scheduling, manufacturing, space exploration, medical imaging, medical care, medical monitoring, collision avoidance, various military offensive and defensive systems, and many hundreds of things.

In addition, Digital signal processing provides the *flexibility* of using the same digital hardware (e.g. DSP chips such as TI TMS 320 series) for many different applications. Now, for example, your smartphone is everything from a cell phone, radio, camera,

navigational tool, music player, video player, etc. all using the same hardware as a result of DSP. Increasingly, everything is being "software-defined" and DSP is really at the heart of that trend which has been evolving for the past several decades.

Having the core theme of **"IT-enabled design and manufacturing"** and remarkable emphasis on, **"multidisciplinary academic environment"** the PDPM IIITDM Jabalpur, it is required to have a creative program that can solves the multidisciplinary research problems and can help in the development of useful products for the nation.

Objectives:

- To develop an ability in future technocrats to identify the principles of signal processing domain and elaborate these principles in scientific and technological terms
- To provide the deep insight about signal processing system by exposing students to various fields like communication, image, video, biomedical, speech and audio processing
- To train the students in the simulation, design, fabrication and characterization of signal processing systems/subsystems
- To provide hands-on experience to use software tools like DSP, Matlab and Open CV LabView OpenViBE etc. for System and solution design.
- To develop an ability to consider current limits to and future priorities for, signal processing domain during product design
- To develop an ability to understand the customer's needs in the telecommunications, aerospace, audio, video, sensors, and other areas.
- To develop an ability to engineer effective designs within the constraints imposed by the available resources and the fundamental physical limits.
- To prepare innovators and technocrats with advanced knowledge of their respective field so that they can serve the industry and R&D organizations in a better way.

M.Tech. (Signal Processing) Employment Areas

- Signal processing for environment, automation, industry
- Robotics and related field
- Intelligent transport systems
- Biomedical and Health care Industry
- Academic and Research Organizations
- Telecommunication and Mobile Communication
- Automotive technologies and aerospace
- Police and Defence Sector
- Entertainment and Media Houses

M.Tech. (Signal Processing) Job Types

• Systems Engineer • Communications Engineer • Defence Engineer • Information Processing Engineer • Signal Processing Engineer • Telecommunications Engineer • Project Lead Engineer •Biomedical Engineer • Multimedia Firmware Engineer • Application Engineer

Advance Course in M. Tech. Signal Processing

PhD (Signal Processing)

Eligibility for Admission:

Candidates with a B.E. / B.Tech (Biomedical Engineering, Communications Engineering, Computer Science Engineering, Electrical Engineering, Electronics Engineering, Instrumentation Technology, Mechatronics Engineering, Telecommunication Engineering) or equivalent with having valid Gate Score are eligible for M.Tech in Signal Processing.

Course Structure

The core subjects provide a broad, yet in-depth background aimed at signal processing domain. Track-specific core subjects provide an up-to-date knowledge in communication, image, video, biomedical, speech and audio processing. Main subjects include Advanced Communication Systems, Multirate signal processing, Image Processing, Biomedical Signal Processing, Speech Information Processing. Lab courses provide practical training in experimental and simulation methods, while the one year (Total duration is two years) Master's thesis gives a thorough exposure to doing research in Signal Processing areas.

Semester I		
1.	Professional and Communication Skill**	1-0-2-2
2.	Core1: Advanced Signal Processing (EC511)	3-0-0-4
3.	Core2: Biomedical Signal Processing (EC602)	3-0-0-4
4.	Core3: Advanced Time-Frequency Analysis (EC526)	3-0-0-4
5.	Elective I: List is given Appendix I	3-0-0-4
6.	Lab1: Advanced signal processing (EC511L)	0-0-3-2
Semester II		
1.	Core 4: Advanced Image Processing (EC527)	3-0-0-4
2.	Elective 2: List is given Appendix I	3-0-0-4
3.	Elective 3: List is given Appendix I	3-0-0-4
4.	Elective 4: List is given Appendix I	3-0-0-4
5.	Lab 2: Advanced image processing (EC527L)	0-0-3-2
Semester III		
1.	Thesis Credit (EC 699)	0-0-0-16
2.	Graduate Seminar 1 (EC 598)	0-0-0-2
Semester IV		
1.	Thesis Credit (EC 699)	0-0-0-16
2.	Graduate Seminar II (EC 599)	0-0-0-2

List of Elective Courses for M.Tech:

Course Number	Course Name	C
EC603	Computer Vision	4
EC639	Advanced Filter Design	4
EC606	Signal Processing for Communication	4
EC637	Digital Signal Compression	4
EC636	Wavelet and Filter Banks	4
EC605	Advanced Topics in Signal Processing	4
EC661	Fuzzy Logic and Neural Networks	4
EC609	Machine Learning and Pattern Recognition	4
EC600	Speech Signal Processing	4
EC601	Speech Technology	4
EC607	Multimedia Security	4
EC512	Multirate Signal processing (EC512)	4
EC608	Sparse Representations and Compressive Sensing	4
EC610	Biometrics	4
EC422b	Applicaction of Signal And Image Processing	4
EC529	Mathematical Methods and Techniques In Signal Processing	4
EC530	Adaptive Signal Processing	4
EC626	Multidimensional Digital Signal Processing	4

Course Title	:	Advanced Signal Processing			
Course Code	:	EC511	Course Type	:	Core 1
Contact Hours	:	L-3 T- 0 P- 0	Credit	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [10H]

Overview of Discrete Fourier transform: Properties and applications, FFT: Radix-2, Radix-4, Split radix-FFT algorithms, FFT algorithms in linear filtering and correlation, Discrete Cosine Transform /Discrete Sin Transform: Properties and Applications

Module 2: [14H]

Design of Digital filters: Design of linear phase FIR filter: window techniques, frequency sampling methods, design of optimum equi-ripple linear phase FIR filters, Design of IIR filters: approximation of derivatives, impulse invariance bilinear transformation, matched Z-transforms, Optimization Methods for IIR and FIR filter Design: Deczky's method for IIR filter design in the frequency domain, Pade approximation method, Least- squares design method in time domain; Frequency sampling method for FIR filter.

Module 3: [6H]

Introduction to Multi-rate Digital Signal Processing – Sample rate reduction – decimation by integer factors- sampling rate increase – interpolation by integer facto – Design of practical sampling rate converters Filter Specification- filter requirement for individual stages – Determining the number of stages and decimation factors – Sampling rate conversion using poly-phase filter structure – poly-phase implementation of interpolators.

Module 4: [6H]

Adaptive Signal Processing – Adaptive filters – Concepts- Adaptive filter as a Noise Canceller – Other configurations of the adaptive filter – Main components of the adaptive filter – Basic Wiener filter theory – The basic LMS adaptive algorithm – Practical limitations of the basic LMS algorithm – Recursive Least Square Algorithm – Limitations – Factorization Algorithm.

Module 5: [4H]

Applications of digital signal processing: Speech signal Processing, Bioelectric signal etc

Suggested Textbooks:

1. S. K. Mitra, Digital Signal Processing: A Computer Based Approach. Tata McGraw Hill McGraw Hill, 2006.
2. John G.Proakis, Dimitris G.Manobakis, Digital Signal Processing, Principles, Algorithms and Applications, Third edition, (2000) PHI.

References:

1. P.P. Vaidyanathan. Multirate systems and filter banks. Prentice Hall. PTR. 1993.
2. N.J. Fliege. Multirate digital signal processing. John Wiley 1994.
3. Digital Signal Processing Emmanuel C Ifeachor, Barrie W Jrevis, Pearson Education

Course Title	:	Advanced Image Processing			
Course Code	:	EC527	**Course Type**	:	Core 4
Contact Hours	:	L-3 T- 0 P- 0	**Credit**	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [10H]

Human visual system and image perception; Monochrome and colour vision models;Image acquisition and display: Video I/O devices; Standard video formats; Imagedigitization, Display and storage;

Module 2: [14H]

2-D signals and systems; Image transforms: 2D-DFT,DCT, KLT, Harr transform and discrete wavelet transform.

Module 3: [6H]

Image enhancement:Histogram processing, Spatial-filtering, Frequency-domain filtering; Image restoration:Linear degradation model, Inverse filtering, Wiener filtering.

Module 4: [6H]

Image compression: Lossyand lossless compression, Entropy coding, Transform coding, Subband coding; Imagecompression standards: Video compression- motion compensation, Video compressionstandards.

Module 5: [4H]

Image analysis: Edge and line detection, Segmentation, Feature extraction,Classification; Image texture analysis; Morphological image processing: Binarymorphology- Erosion, Dilation, Opening and closing operations, Applications, Basic grayscale morphology operations; Colour image processing: Colour models and colourimage processing.

Suggested Textbooks:

1. R. C. Gonzalez and R. E. Woods, Digital Image Processing, Pearson Education, 2008.
2. R. C. Gonzalez, R. E. Woods and S. L. Eddins, Digital Image Processing using MATLAB, Pearson Education, 2004.

References:

1. A. K. Jain, Fundamentals of Digital Image processing, Pearson Education, 2009.2. N.J. Fliege.

Course Title	:	Advanced Time frequency analysis			
Course Code	:	EC526	**Course Type**	:	Core 3
Contact Hours	:	L-3 T- 0 P- 0	**Credit**	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [10H]

Basics of Fourier Analysis, The Short-Time Fourier Transform/Spectrogram, Continuous Wavelet Transform/Scalogram, S-tranform.

Module 2: [14H]

Quadratic Time Frequency Transform, Wigner-Ville Distribution (WVD), PWVD, SPWVD, Margenau–Hill (MH), and Rihaczek (RIH) distributions, pseudo-MH (PMH) and pseudo-WV (PWV).

Module 3: [6H]

Empirical Mode decomposition, Improved EMD, and Other non-stationary signal decomposition.

Module 4: [6H]

Non-stationary decomposition based statistical analysis, features extraction.

Module 5: [4H]

Application of Time frequency in biomedical signal processing.

Suggested Textbooks:

[1] S. Mallat, A Wavelet Tour of Signal Processing (3rd edition), Academic Press, 2008, ISBN: 978-0123743701.

[2] Leon Cohen, Time-Frequency Analysis, Prentice Hall; 1994, ISBN: 978-0135945322.

[3] B. Boashash, Time-Frequency Signal Analysis and Processing: A Comprehensive Reference, Elsevier Science, 2003, ISBN-13: 978-0080443355.

[4] R. M. Rao and A. S. Bopardikar, Wavelet Transforms: Introduction to Theory& Applications, Prentice Hall, 1998, ISBN-13: 978-020163463

References:

1. IEEE International Symposium on Time-Frequency and Time-ScaleAnalysis, IEEE Press, NY, 1992. (Publ. TH4788 or ISBN 0-7803-0805-0)

Course Title	:	Biomedical Signal Processing			
Course Code	:	EC602	Course Type	:	Core 2
Contact Hours	:	L-3 T- 0 P- 0	Credit	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [8H]

Sources of bioelectric potential, resting potential, action potential, propagation of action potentials in nerves; rhythmic excitation of heart; ECG: Pre-processing, wave form recognition, morphological studies and rhythm analysis, automated diagnosis based on decision theory, ECG compression, Evoked potential estimation.

Module 2: [10H]

EEG: Evoked responses, averaging techniques, pattern recognition of alpha, beta, theta and delta waves in EEG waves, sleep stages, epilepsy detection.EMG: Wave pattern studies, biofeedback. application of signal processing techniques such as linear prediction, lattice - filtering & adaptive signal processing for extraction of physiological parameters;

Module 3: [10H]

Introduction to wavelets & time frequency models and their applications to heart sounds, fetal ECG & vesicular sound signals; speech production model, inverse filtering techniques for extraction of vocal tract parameters, glottal inverse filtering; electroglottograpic signals; signal processing techniques for detection of pathologies in speech production system; speech synthesis and speech recognition in diagnostic and; therapeutic applications;

Module 4: [12H]

Medical imaging techniques: CT scan, ultrasound, NMR and PET. Experiments are based on acquisition of biomedical signals and implementation of algorithms covered in the course to charcterise these signals.

Suggested Textbooks:

1. E.N. Bruce, Biomedical Signal Processing and Signal Modelling, John Wiley and Sons, 2001.
2. W. J. Tompkins, ed., Biomedical Signal Processing; Prentice Hall, 1995.
3. M. Akay: Wavelets and Time frequency methods for Biomedical signal Processing; IEEE Press, 1995.

References:

1. A. C. Guyton: Human Physiology; Prism International, 1991.

Course Title	:	Advanced Signal Processing Lab			
Course Code	:	EC511L	Course Type	:	Lab.
Contact Hours	:	L-0 T- 0 P-1	Credit	:	02
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Regular Lab Performance (60%), End-Term (40%)			

List of Experiments:

Exp. 1: Signal Generation, Visualization, Signal Smoothing and Reconstruction
Exp. 2: Simulation of Discrete Time systems in Matlab: (a) Linear convolution (b) Difference Equation
Exp. 3: Computation of Different Transforms in Matlab: (a) STFT (b) DFT (c) FFT (d)1- DCT and 2-DCT
Exp. 4: Realization of Digital Filters: IIR and FIR in Matlab
Exp. 5: Design of Analog and Digital Filters in Matlab
Exp. 6: Implementation of Digital filters on DSP processor (TMS320C6713)
Exp. 7: Analysis of Finite Word-Length Effects to Digital filters
Exp. 8: Simulation of multirate basic operations in Matlab
Exp. 9: Simulation of various time-frequency techniques in Matlab
Exp. 10: Implementation of non-stationary method in Matlab
Exp. 11: Student Mini Project

Suggested Textbooks:

1. Digital Signal Processing: a computer-based approach: Sanjit Kumar Mitra, Yonghong Kuo

Course Title	:	Advanced Image Processing Lab.			
Course Code	:	EC527L	Course Type	:	Lab.
Contact Hours	:	L-0 T- 0 P- 1	Credit	:	02
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Regular Lab Performance (60%), End-Term (40%)			

List of Experiments:

Exp. 1: Implemention of read, write and display of various type of images.
Exp. 2: Point processing in spatial domain: (a) Negation of an image, (b) Thresholding of an image, (c) Contrast Stretching of an image
Exp. 3: Histogran based analysis of images
Exp. 4: Simulation of zooming by interpolation and replication
Exp. 5: Filtering in spatial domain: (a) Low Pass Filtering, (b) High Pass Filtering, (c) Median filtering
Exp. 6: Simulations for Image denoising and Image deblurring.
Exp. 7: Simulations to understand edge detection operators.
Exp. 8: Implementation of 2-D DFT/FFT and DCT and its application.
Exp. 9: Display of color images and conversion between color spaces.
Exp. 10: Simulation of DWT of images and its application.
Exp. 11: LSB based image watermarking
Exp. 12: Simulation of image segmentation
Exp. 13: Student Mini Project

Suggested Textbooks:

Gonzalez, R. C., Woods, R. E., and Eddins, S. L. [2004]. Digital Image Processing Using MATLAB, Prentice Hall, Upper Saddle River, NJ.

Course Title	:	Multirate Signal Processing			
Course Code	:	EC512	Course Type	:	Elective
Contact Hours	:	L-3 T- 0 P- 0	Credit	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [10H]

Overview of DSP Discrte time system, Review of Digital filters:
FIR, IIR filter, all pass filter, Design of digital filters: FIR and IIR

Module 2: [10H]

Introductuion to multirate system:
Sample rate reduction – decimation by integer factors- sampling rate increase -- interpolation by integer facto – Design of practical sampling rate converters Filter Specification- filter equirement for individual stages – Determining the number of stages and decimation factors – Sampling rate conversion using poly-phase filter structure – poly-phase implementation of interpolators, Subband coding, Types of subband coding system, Distortion in Subband coding, Nyquit filter, Interpolated filter

Module 3: [10H]

Multirate filter Bank:
Uniform Filter bank, DFT Filter bank, Classification filter bank: M-channel Filter bank and two-channel filter bank, Analysis of two-channel filter,aliasing cancellation codition, perfect reconstruction condtion, classifcation of two-channel filter bank, Design of PR filter bank and NPR filter bank, Computaionally efficent structure for two-channel filter bank

Module 4: [10H]

Multichannel Filter Bank:
Classifcation of multichannel Filter bank: Tree structure Filter bank, modulated based filter bank, parallel filter bank, Analysis of Tree structure filterbank, Analsyis for cosine modualted filter bank, Design of multichannel filter bank Application of multirate signal processing: audio signal

Suggested Textbooks:

1. S. K. Mitra, Digital Signal Processing: A Computer Based Approach. Tata McGraw Hill McGraw Hill, 2006.
2. John G.Proakis, Dimitris G.Manobakis, Digital Signal Processing, Principles, Algorithms and Applications, Third edition, (2000) PHI

References:

1. P.P. Vaidyanathan. Multirate systems and filter banks. Prentice Hall. PTR. 1993.
2. N.J. Fliege. Multirate digital signal processing. John Wiley 1994.
3. Digital Signal Processing Emmanuel C Ifeachor, Barrie W Jrevis, Pearson Education

Course Title	:	Computer Vision			
Course Code	:	EC603	Course Type	:	Elective
Contact Hours	:	L-3 T- 0 P- 0	Credit	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1:	[10H]

Image formation and image models; Image filtering; Lines, Blobs, Edges and boundarydetection;

Module 2:	[10H]

Representation of 2-D and 3-D structures; Bayes decision theory for patternrecognition;

Module 3:	[10H]

Supervised and unsupervised classifications; Parametric and nonparametricschemes; Clustering for knowledge representation; Applications of neural networks andfuzzy logic in pattern recognition;

Module 4:	[10H]

Feature extraction in images; Texture analysis andclassification; Image segmentation; Optical character recognition; 2-D and 3-D objectrecognition; Surface extraction from monocular images; Stereo image pair analysis; Optical flow and 3-D motion analysis.

Suggested Textbooks:

1. A. K. Jain, Fundamentals of Digital Image processing, Pearson Education, 2009.
2. R. C. Gonzalez and R. E. Woods, Digital Image Processing, Addison-Wesley, 2008.
3. R. Schalkoff, Pattern Recognition – Statistical, Structural and Neural Approaches, John Wiley, 2007.

References:

1. D. A. Forsyth and J. Ponce, Computer Vision, A Modern Approach, Pearson Education.
2. D. H. Ballard and C. M. Brown, Computer Vision, Prentice Hall, 1982.
3. R. O. Duda and P. E. Hart, Pattern Classification and Scene Analysis, John Wiley, 2006.
4. R. Jain, R. Kasturi and B. G. Schunck, Machine Vision, McGraw-Hill, 1995.

Course Title	:	Advanced Filter Design			
Course Code	:	EC639	**Course Type**	:	Elective
Contact Hours	:	L-3 T- 0 P- 0	**Credit**	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	**Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)**			

Course Details:

Module 1: [8H]

Introduction to DSP
Discrete-time signals, sequence operations, sampling, Digital Signal Processing and its applications, filter and its applications, Discrete Fourier and Z-transforms, system function for linear shift-invariant systems, Fast Fourier Transform (FFT), fast convolution by FFT using the overlap-save or overlap-add methods, FFT algorithms in linear filtering and correlation.

Module 2: [8H]

Introduction of Digital Filters
Design of Infinite Impulse Response (IIR) digital filters by transformation from analog filters: Impulse Invariance, Bilinear Transformation, Matched Z-transforms, Design of LP, HP, BP, SP IIR Filters. Design of Finite Impulse Response (FIR) digital filters by Windowing, Frequency Sampling, Design of optimum Equiripple linear phase FIR filters, Design of LP, HP, BP, SP IIR Filters.

Module 3: [8H]

Advance Design methods of Digital Filters
Optimization Methods for IIR and FIR filter Design: Deczky's method for IIR filter design in the frequency domain, Pade approximation method, Least- squares design method in time domain, Implementation aspects: Quantization of parameters, Finite word-length, and Filter Structures.

Module 4: [8H]

Computer Aided Techniques of Filter Design
Computer Aided Design of FIR and IIR digital filters, Design of Digital filters by Criterion Minimization, Computer Added Design of Equiripple FIR Filters, Digital IIR and FIR Filter Design Using MATLAB.

Module 5: [8H]

Application of Digital Filters; Application of Digital Filters in Signal and Image processing, Biomedical signal processing, Speech Processing etc.

Suggested Textbooks:

1. S. K. Mitra, Digital Signal Processing: A Computer Based Approach. Tata McGraw Hill. McGraw Hill, 2006.

References:

1. John G. Proakis, Dimitris G. Manobakis, Digital Signal Processing, Principles, Algorithms and Applications, Third edition, (2000) PHI
2. Digital Signal Processing Emmanuel C Ifeachor, Barrie W Jrevis, Pearson Education

Course Title	:	Signal Processing for Communucations			
Course Code	:	EC606	Course Type	:	Elective
Contact Hours	:	L-3 T- 0 P- 0	Credit	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [6H]

Ultra wideband (UWB) communication systems: UWB concepts, advantages and challenges, single band versus multiband, FCC emission limits, UWB applications;

Module 2: [10H]

UWB sources and antennas: UWB pulse generation, UWB antennas; Pulse-detection and multiple-access techniques: Conventional pulse-detection techniques, pulse modulation and detection techniques, UWB multiple-access techniques;

Module 3: [10H]

Interference issues: Interference with WLAN, cellular & GPS.

Module 4: [10H]

Multiple-Input, Multiple-Output (MIMO) wireless communication: Basic MIMO model, MIMO capacity in fading channels, Diversity multiplexing trade off, Space-time code for MIMO wireless communication.

Module 5: [4H]

Software Define Radio (SDR): Characteristics and benefits of a software radio, design principles of software radio, enhanced flexibility with software radios, receiver design challenges

Suggested Textbooks:

1. K. Siwiak and D. McKeown, Ultra-Wideband Radio Technology, John Wiley and Sons Limited, 2004.
2. S. Haykin and M. Moher, Modern Wireless Communication, Pearson Education, 2005.
3. Jeffrey H. Reed, Software Radio: A Modern Approach to Radio Engineering, Prentice Hall, May 2002

References:

1. Faranak Nekoogar, Ultra-Wideband Communications: Fundamentals and Applications, Prentice Hall, 2005.
2. C. Oestges and B. Clerckx, MMIO Wireless Communications, 1st Ed, 2007.
3. Paul Burns, Software Defined Radio for 3G, Artech House Inc., 2003.

Course Title	:	**Digital Signal Compression**			
Course Code	:	EC637	**Course Type**	:	**Elective**
Contact Hours	:	L-3 T- 0 P- 0	**Credit**	:	04
Program/Semester	:	**M. Tech.**			
Pre-requisites	:				
Evaluation Scheme	:	**Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)**			

Course Details:

Module 1:	[8H]

Compression Techniques: Loss less compression, Lossy Compression, Measures of performance, Modeling and coding, Mathematical Preliminaries for Lossless compression: A brief introduction to information theory: Entropy, Information Value, Data Redundancy and Models.

Module 2:	[8H]

Shannon-Fano Algorithm, Huffman Algorithm, Adaptive Huffman Coding. Arithmetic Coding (Encoding, Decoding, Adaptive Coding), Golomb codes, Rice codes, Tunstall codes, Applications of Hoffman coding: Lossless image compression, Text compression, Audio Compression

Module 3:	[12H]

Dictionary Methods: LZ77, LZ78, LZW Algorithms, Wavelet Methods: Discrete Wavelet Transform, JPEG 2000, Image Compression: Discrete Cosine Transform, JPEG.

Module 4:	[12H]

Audio Compression: Digital Audio, WAVE, FLAC, MPEG-1/2 Audio Layers. Video Compression: Motion Compensation, Temporal and Spatial Prediction. MPEG and H.264

Suggested Textbooks:

1. Khalid Sayood, Introduction to Data Compression, Morgan Kaufmann Publishers
2. Elements of Data Compression, Drozdek, Cengage Learning

References:

1. Data Compression: The Complete Reference 4th Edition by David Salomon, Springer
2. Text Compression1st Edition by Timothy C. Bell Prentice Hall

Course Title	:	Wavelets and Filter Banks			
Course Code	:	EC636	Course Type	:	Elective
Contact Hours	:	L-3 T- 0 P- 0	Credit	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [10H]

Fourier and Inverse Fourier Transforms. The Gabor Transform, Short Time FourierTransform and the Uncertainty Principle.

Module 2: [10H]

Wavelet Transforms: Continuous and Discrete Wavelet Transform, Basic Properties of Wavelet Transforms, Orthonormal Wavelets, Wavelet Series, and Multiresolution Analysis, Scaling Functions and Orthonormal Wavelet Bases, Constructions of Orthonormal Wavelets, Compactly Supported Wavelets.

Module 3: [10H]

Fundamentals of Multirate Theory: The sampling theorem, Multirate operations: Decimation and Interpolation, multirate identities, Polyphase representation, Digital Filter Banks, DFT Filter Bank-Maximally decimated filter banks, Errors in the QMF bank, Perfect reconstruction (PR) QMF Bank, Design of an alias free QMF Bank.

Module 4: [10H]

M-channel perfect reconstruction filter banks: Uniform band and non uniform filter bank, tree structured filter bank, Errors created by filter bank system, Polyphase representation, and perfect reconstruction systems.

Module 5: [10H]

Cosine Modulated filter banks: Cosine Modulated pseudo QMF Bank, Alias-cancellation, Phase distortion, closed form expression, Polyphase structure, PR Systems

Suggested Textbooks:

1. P.P. Vaidyanathan. Multirate systems and filter banks. Prentice Hall. PTR. 1993. 2. N.J. Fliege.
2. Multirate digital signal processing. John Wiley 1994.

References:

1. K. Chui, An Introduction to Wavelets, Academic Press USA.
2. I. Daubechies, Ten Lectures on Wavelets, SIAM, 1990.
3. Lokenath Debnath, Wavelet Transforms and Their Applications, Birkhauser 2002.
4. S. Mallat, A wavelet Tour of Signal Processing, Academic Press USA 2009.

Course Title	:	Advanced Topics in Signal Processing			
Course Code	:	EC605	Course Type	:	Elective
Contact Hours	:	L-3 T- 0 P- 0	Credit	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [10H]

Multirate signal processing: Fundamentals of multirate systems: Introduction, basicmultirate operations,Interconnection of building blocks, Polyphase representation,Multistage implementations, Special filters and filter banks; Maximally decimated filterbanks: Introduction, Errors created in QMF bank, Alias free QMF system, Powersymmetric QMF banks, M-channel filter banks, Polyphase representation, Perfect reconstruction systems;

Module 2: [10H]

Paraunitary Perfect Reconstruction (PR) Filter Banks: Introduction, Lossless transfer matrices, Filter bank properties induced byparaunitariness, Two channel FIR paraunitary QMF banks, Two channel paraunitaryQMF lattice, M-channel FIR paraunitary filter banks;

Linear Phase Perfect Reconstruction QMF Banks: Introduction, Lattice structures for linear phase FIR PR QMF banks, Formal synthesis of linear phase FIR PR QMF lattice;

Cosinemodulated Filter Banks: Introduction, Pseudo QMF bank, Design of pseudo QMFbank, Efficient polyphase structures, Cosine modulated perfect reconstructionsystems;

Module 3: [10H]

Applications of Multirate Signal Processing: Analysis of audio, Speech,Image and video signals;

Time frequency signal analysis and processing: Time-Frequency concepts, Time-domain representation, Frequency domain representation,Joint time-frequency representation, Desirable characteristics of a time-frequency distribution (TFD), Analytic signals, Hilbert transform, Duration, Bandwidth, Bandwidthduration product, Uncertainty principle, Instantaneous frequency, Time delay;

Module 4: [10H]

Time-Frequency Distributions: Wigner distribution, Wigner-ville distribution, Time-varying power spectral density, Short-term Fourier transform, Spectrogram, Gabor transform,Instantaneous power spectra, Energy density, Quadratic TFDs, Relationship betweenTFDs;

Applications of Time-Frequency Analysis: Analysis of non-stationary signalslike speech, audio, image and video signals.

Suggested Textbooks:

P. P. Vaidyanathan, Multirate Systems and Filter Banks, Pearson-Education, Delhi, 2004.

1. B. Boashash, Time-Frequency Signal Analysis and Processing: A Comprehensive Reference, Elsevier, UK, 2003.
2. L. Cohen, Time-Frequency Analysis, Prentice Hall, 1995.

References:

1. F. Hlawatsch and F. Auger, Time-Frequency analysis: Concepts and Methods, Wiley-Iste, 2008
2. A. Spanias, T. Painter and V. Atti, Audio Signal Processing & Coding, Wiley-Interscience, NJ, USA,

Course Title	:	Fuzzy Logic & Neural Networks			
Course Code	:	EC661	Course Type	:	Elective
Contact Hours	:	L-3 T- 0 P- 0	Credit	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [10H]

Classical sets – Fuzzy sets – Membership functions – Fuzzy relations – Knowledge base – Fuzzification– Fuzzy rules – Decision-making logic – Defuzzification. Mamdani and Takagi-Sugeno architectures of Fuzzy inference system. Fuzzy Logic Controllers.

Module 2: [10H]

Introduction to Neural Networks – Artificial neuron – Neuron modelling, Multi-layer feed forward network – Learning Techniques and algorithms - Error back-propagation, generalized delta rule. Radialbasis function networks.

Module 3: [10H]

Adaptive Neuro-Fuzzy Inference System (ANFIS),

Module 4: [10H]

Engineering applications of Fuzzy Logic system.

Suggested Textbooks:

1. T. J. Ross, 'Fuzzy Logic with Engineering Applications', Tata McGraw Hill, 1997.
2. J. M. Zurada, 'Introduction to Artificial Neural Systems', Jaico Publishing home, 2002.
3. Simon Haykin, 'Neural Networks', Pearson Education, 2003

References:

1. John Yen & Reza Langari, 'Fuzzy Logic – Intelligence Control & Information', Pearson Education, New Delhi, 2003.
2. J.S.R. Jang, C.T. Sun, and E. Mizutani, "Neuro-Fuzzy and Soft Computing: A Computational Approach to Learning and Machine Intelligence", Prentice Hall, 1996.

Course Title	:	Machine Learning and Pattern Recognition			
Course Code	:	EC609	Course Type	:	Elective
Contact Hours	:	L-3 T- 0 P- 0	Credit	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [8H]

Introduction: Problem framing, feature selection, dimensionality reduction using PCA and other methods.

Module 2: [10H]

Discriminative classifiers: LDA, Multi-layer perceptron, backpropagation, SVM; Unsupervised learning: Clustering, Vector Quantization, Kohonen Map, EM Algorithm.

Module 3: [10H]

Generative models: Definition and characteristics, probabilistic graphical models, density estimation in learning.

Module 4: [10H]

Combining classifiers: Advantages, boosting, hierarchical classifiers, and issues; Selected special topics such as manifold learning and case studies.

Suggested Textbooks:

1. S. Marsland, Machine Learning: An Algorithmic Perspective, Chapman & Hall/CRC, 2009.
2. R. O. Duda, P. E. Hart and D. G. Stork, Pattern Classification, 2nd Edn., Wiley India, 2007.

References:

1. C. . Bishop, Pattern Recognition and Machine Learning (Information Science and Statistics), Springer, 2006.
2. I. H. Witten, Data Mining: Practical Machine Learning Tools And Techniques, 2nd Edn., Elsevier India, 2008

Course Title	:	Speech Signal Processing			
Course Code	:	EC600	Course Type	:	Elective
Contact Hours	:	L-3 T- 0 P- 0	Credit	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [8H]

Introduction: speech production and perception, information sources in speech, linguistic aspect of speech, acoustic and articulatory phonetics, nature of speech, models for speech analysis and perception;

Module 2: [10H]

Short-term processing: need, approach, time, frequency and time-frequency analysis; Short-term Fourier transform (STFT): overview of Fourier representation, non-stationary signals, development of STFT, transform and filter-bank views of STFT;

Module 3: [10H]

Cesptrum analysis: Basis and development, delta, delta-delta and mel-cepstrum, homomorphic signal processing, real and complex cepstrum; Linear Prediction (LP) analysis: Basis and development, Levinson-Durbin's method, normalized error, LP spectrum, LP cepstrum, LP residual; Sinusoidal analysis: Basis and development, phase unwrapping, sinusoidal analysis and synthesis of speech;

Module 4: [10H]

Speech coding: Need and parameters, classification, waveform coders, speech-specific coders, GSM, CDMA and other mobile coders; Applications: Some applications like pitch extraction, spectral analysis and coding standard.

Suggested Textbooks:

1. L.R. Rabiner and R.W. Schafer, Digital Processing of Speech Signals Pearson Education, Delhi, India, 2004
2. J. R. Deller, Jr., J. H. L. Hansen and J. G. Proakis Discrete-Time Processing of Speech Signals, Wiley-IEEE Press, NY, USA, 1999.
3. D. O'Shaughnessy, Speech Communications: Human and Machine, Second Edition,University Press, 2005.

References:

1. T. F. Quatieri, "Discrete time processing of speech signals", Pearson Education, 2005.
2. L. R. Rabiner, B. H. Jhuang and B. Yegnanarayana, "Fundamentals of speech recognition", Pearson Education, 2009.

Course Title	:	Speech Technology			
Course Code	:	EC601	Course Type	:	Elective
Contact Hours	:	L-3 T- 0 P- 0	Credit	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [8H]

Applications, pattern recognition, feature extraction, modeling, testing;

Module 2: [10H]

Speech recognition: Objective, issues, block diagram description, classification, development of speech recognition system using vector quantization (VQ), dynamic time warping (DTW), Hidden Markov Model (HMM) and Neural networks (NN)

Module 3: [10H]

Speech synthesis: Objective, issues, block diagram description, classification, development of speech synthesis system using articulatory, parametric, concatenative and HMM based approaches

Module 4: [10H]

Speaker recognition: Objective, issues, block diagram description, classification, development of speaker recognition system using VQ, DTW, GMM, NN and HMM;

Module 5: [10H]

Speech enhancement: Objective, issues, block diagram description, classification, enhancement of noisy speech, reverberant speech enhancement and multi-speaker speech processing.

Suggested Textbooks:

2. L. R. Rabiner, B. H. Jhuang and B. Yegnanarayana, "Fundamentals of speech recognition", Pearson Education, 2009.
3. J. R. Deller, Jr., J. H. L. Hansen and J. G. Proakis Discrete-Time Processing of Speech Signals, Wiley-IEEE Press, NY, USA, 1999.

References:

1. D. O'Shaughnessy, Speech Communications: Human and Machine, Second Edition,University Press, 2005.
2. J. Benesty, M. M. Sondhi and Y. Huang, "Handbook of speech processing", Springer, 2008.

Course Title	:	Multimedia Security			
Course Code	:	EC607	Course Type	:	Elective
Contact Hours	:	L-3 T- 0 P- 0	Credit	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [8H]

Digital rights management (DRM) framework: Requirements of a DRM system,Architectures, Dimensions to content protection: Tracing, authentication,Encryption, Key management and access control.

Module 2: [8H]

Multimedia fingerprinting: Fingerprinting basics, Marking assumption, Collusion attack,Frame proof and anti-collusion codes; Combining fingerprint modulation with coding:Introduction to coded fingerprint modulation, Semi-fragile fingerprinting; Multicastfingerprinting problem: Bandwidth security tradeoff; Efficient security architectures:WHIM, Watercasting, Chameleon cipher; Joint fingerprinting and decryption (JFD)framework; Fingercasting.

Module 3: [8H]

Multimedia encryption: Traditional symmetric key ciphers, Shannon's principles ofconfusion and diffusion; Overview of Advanced Encryption Standard (AES); Block andstream ciphers; Information theoretic secrecy; Multimedia encryption: Concept of layering,Multimedia compression technologies and standards; Principles for selective encryption;Image and Video encryption schemes: Chaotic maps, Transform domain encryption,Huffman tree mutation; Streaming media encryption: Scalable video protection; Keymanagement and distribution schemes: Key management for IP Multimedia: Public key methods, Key distribution by data embedding; Key exchange in multicast groups: Keyrefresh problem, Logical Key Hierarchy (LKH); Key distribution for fine grained accesscontrol.

Module 4: [8H]

Content authentication techniques: Data authentication, One way hash functions,Message authentication codes (MACs); Multimedia authentication: Perceptual hashes;Parameterization; Watermarking based authentication: Notion of semi-fragility,Construction and design of semi-fragile watermarks; Example: Principles of videoauthentication: Scalability issues, packet loss, post-processing.

Module 5: [8H]

Privacy preserving protocols: Zero knowledge protocols, Anonymous fingerprinting,Public key watermarking, Non-perfect secret sharing constructions for anonymousfingerprinting with shared access control.

Suggested Textbooks:

1. W. Zeng, H. Yu and C. Lin, Multimedia Security Technologies for Digital Rights Management, Elsevier, UK, 2006.
2. K. Karthik and D. Hatzinakos, Multimedia Encoding for Access Control With Traitor Tracing: Balancing Secrecy, Privacy and Traceability, VDM Verlag, ISBN: 978-3-8364-3638-0, Germany, 2008.

References:

1. B. Furht and D. Kirovski (Eds.), Multimedia Security Handbook, CRC press, U.S., 2005.
2. B. Schneier, Applied Cryptography: Protocols, Algorithms and Source Code in C, 2nd EdITION, Wiley India, 2007

Course Title	:	Sparse Representations and Compressive Sensing			
Course Code	:	EC608	Course Type	:	Elective
Contact Hours	:	L-3 T- 0 P- 0	Credit	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [10H]

Introduction to signal representations: Fourier transform, band limited signals, sampling bandlimited signals

Module 2: [10H]

Sparse representation of signals: wavelet transform, ridgelet transform,curvelet transform; Sampling sparse signals (compressive sensing): incoherence, restrictedisometry property, null space property, random matrices

Module 3: [10H]

Robust and stable reconstruction: L1 minimization, basis pursuit, matching pursuit; Applications of sparse representations:denoising, compression, dictionary design;

Module 4: [10H]

Applications of Compressive Sensing: analog-to digital conversion, imaging, radar, DNA microarray, channel estimation; Extensions: low- rankmatrices, matrix completion, nuclear-norm minimization.

Suggested Textbooks:

1. M. Elad, Sparse and Redundant Representations: From Theory to Applications in Signal and Image Processing, Springer, 2010.
2. J. L. Starck, F. Murtagh and J. M. Fadili, Sparse Image and Signal Processing: Wavelets, Curvelets, Morphological Diversity, CUP, 2010.

References:

1. D. Maltoni, D. Maio, Anil K. Jain and Salil Prabhakar "Handbook of Fingerprint Recognition", Springer, 2009,
2. Stan Z. Li and Anil K. Jain "Handbook of Face Recognition", Springer; 2nd ed., 2011.

Course Title	:	Biometrics			
Course Code	:	EC610	Course Type	:	Elective
Contact Hours	:	L-3 T- 0 P- 0	Credit	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [10H]

Introduction: History and Overview of Biometrics, Applications of Biometrics and Future Trends; Image Processing for Biometric Applications

Module 2: [10H]

Biometrics as a Pattern Recognition System; Biometric System Modalities: Face Recognition, Fingerprint Recognition, Iris Recognition,

Module 3: [10H]

Voice/Speaker recognition, Hand Geometry Recognition, Gait Recognition, Signature Recognition; Additional Biometric Traits;

Module 4: [10H]

Biometric System Design and Performance Evaluation; Multi-modal Biometric Systems; Biometric Security; Privacy and Ethical Issues.

Suggested Textbooks:

1. Anil K. Jain, Arun A. Ross and Karthik Nandakumar, "Introduction to Biometrics", Springer, 2011, ISBN 978-0-387-77326-1.
2. J. Ashbourn, "Biometrics: Advanced Identity Verification: The Complete Guide", Springer, 2000, ISBN-13: 978-1852332433.
3. J.L. Wayman, A.K. Jain, D. Maltoni and D. Maio, "Biometric Systems: Technology, Design and Performance Evaluation", Springer, 2005, ISBN 978-1-84628-064-1.

References:

1. G. Strang, Linear Algebra and Its Applications, 4th Ed., Cengage, 2006.
2. G. Grimmett and D. Stirzaker, Probability and Random Processes, OUP, 2001.
3. Boyd and L. Vandenberghe, Convex Optimization, CUP, 2004.

Course Title	:	Mathematical Methods and Techniques in Signal Processing			
Course Code	:	EC529	Course Type	:	Elective
Contact Hours	:	L-3 T- 0 P- 0	Credit	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [10H]

Review of vector spaces, inner product spaces, orthogonal projections, state variable representation, Review of probability and random processes, Signal geometry and applications

Module 2: [10H]

Sampling theorems multirate signal processing decimation and expansion (time and frequency domain effects), Sampling rate conversion and efficient architectures, design of high decimation and interpolation filters, Multistage designs.

Module 3: [10H]

Introduction to 2 channel QMF filter bank, M-channel filter banks, overcoming aliasing, amplitude and phase distortions, Sub band coding and Filter Designs: Applications to Signal Compression.

Module 4: [10H]

Introduction to multiresolution analysis and wavelets, wavelet properties, Wavelet decomposition and reconstruction, applications to denoising.

Module 5: [10H]

Derivation of the KL Transform, properties and applications, Topics on matrix calculus and constrained optimization relevant to KL Transform derivations, Fourier expansion, properties, various notions of convergence and applications.

Suggested Textbooks:

1. Moon & Stirling, Mathematical Methods and Algorithms for Signal Processing, Prentice Hall, 2000.

References:

1. P. P. Vaidyanathan, Multirate systems and filter banks, Prentice Hall, 2000.
2. Boggess & F. J. Narcowich, A First Course in Wavelets with Fourier Analysis, Prentice Hall, 2001.
3. G. Strang, Introduction to Linear Algebra, 2016.
4. H. Stark & J. W. Woods, Probability and Random Processes with Applications to Signal Processing.

Course Title	:	Applications of Signal and Image Processing			
Course Code	:	EC422b	Course Type	:	Elective
Contact Hours	:	L-3 T- 0 P- 0	Credit	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [6H]

ECG: Cardiac electrophysiology, relation of electrocardiogram (ECG) components to cardiac events, clinical applications.

Module 2: [6H]

Speech Signals: The source-filter model of speech production, spectrographic analysis of speech. Speech Coding: Analysis-synthesis systems, channel vocoders, linear prediction of speech, linear prediction vocoders.

Module 3: [10H]

Imaging Modalities: Survey of major modalities for medical imaging: ultrasound, X-ray, CT, MRI, PET, and SPECT.
MRI: Physics and signal processing for magnetic resonance imaging.

Module 4: [10H]

Surgical Applications: A survey of surgical applications of medical image processing. Image Segmentation: statistical classification, morphological operators, connected components.

Module 5: [8H]

Application of Signal and Image Processing in power and control systems and mobile robot using physiological signals.

Suggested Textbooks:

[1] Oppenheim, A. V., and R. W. Schafer, with J. R. Buck. Discrete-Time Signal Processing. 2nd ed. Upper Saddle River, NJ: Prentice-Hall, 1999. ISBN: 9780137549207.
[2] Karu, Z. Z. Signals and Systems Made Ridiculously Simple. Huntsville, AL: ZiZi Press, 1995. ISBN: 9780964375215.
[3] Duda, R., and P. Hart. Pattern Classification and Scene Analysis. New York, NY: John Wiley & Sons, 1973. ISBN: 9780471223610.

References:

[1] Clifford, G., F. Azuajae, and P. McSharry. Advanced Methods and Tools for ECG Data Analysis. Norwood, MA: Artech House, 2006. ISBN: 9871580539661.
[2] Rabiner, L. R., and R. W. Schafer. Digital Processing of Speech Signals. Upper Saddle River, NJ: Prentice-Hall, 1978. ISBN: 9780132136037.
[3] Lim, J. S. Two-Dimensional Signal and Image Processing. Upper Saddle River, NJ: Prentice Hall, 1989. ISBN: 9780139353222.
[4] Gonzalez, R., and R. E. Woods. Digital Image Processing. 2nd ed. Upper Saddle River, NJ: Prentice-Hall, 2002. ISBN: 9780201180756.

Course Title	:	Adaptive Signal Processing			
Course Code	:	EC530	Course Type	:	Elective
Contact Hours	:	L-3 T- 0 P- 0	Credit	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [6H]

Introduction to Adaptive Filters. Adaptive filter structures, issues and examples. Applications of adaptive filters. Channel equalization, active noise control. Echo cancellation, beamforming.
Discrete time stochastic processes. Re-visiting probability and random variables. Discrete time random processes. Power spectral density - properties. Autocorrelation and covariance structures of discrete time random processes. Eigen-analysis of autocorrelation matrices.

Module 2: [6H]

Wiener filter, search methods and the LMS algorithm Wiener FIR filter (real case). Steepest descent search and the LMS algorithm. Extension of optimal filtering to complex valued input. The Complex LMS algorithm.
Convergence and Stability Analyses. Convergence analysis of the LMS algorithm, Learning curve and mean square error behavior,Weight error correlation matrix, Dynamics of the steady state mean square error (mse), Misadjustment and stability of excess mse.

Module 3: [10H]

Vector space framework for optimal filtering. Axioms of a vector space, examples, subspace. Linear independence, basis, dimension, direct sum of subspaces, Linear transformation, examples. Range space and null space, rank and nullity of a linear operator, Inner product space, orthogonality, Gram-Schmidt orthogonalization, Orthogonal projection, orthogonal decomposition of subspaces. Vector space of random variables, optimal filtering as an orthogonal projection computation problem.

Module 4: [10H]

The lattice filter and estimator. Forward and backward linear prediction, signal subspace decomposition using forward and backward predictions. Order updating the prediction errors and prediction error variances, basic lattice section. Reflection coefficients, properties, updating predictor coefficients. Lattice filter as a joint process estimator. AR modeling and lattice filters. Gradient adaptive lattice.

Module 5: [8H]

RLS lattice filter. Least square (LS) estimation, pseudo-inverse of a data matrix, optimality of LS estimation. Vector space framework for LS estimation. Time and order updating of an orthogonal projection operator. Order updating prediction errors and prediction error power. Time updating PARCOR coefficients.

Suggested Textbooks:

1. "Adaptive Filter Theory" by S. Haykin, Prentice Hall, Englewood Cliffs, NJ, 1991 (end Ed.).
2. "Adaptive Filters Theory and Applications", by B. Farhang-Boroujeny, John Wiley and Sons.

Course Title	:	Multidimensional Digital Signal Processing			
Course Code	:	EC626	Course Type	:	Elective
Contact Hours	:	L-3 T- 0 P- 0	Credit	:	04
Program/Semester	:	M. Tech.			
Pre-requisites	:				
Evaluation Scheme	:	Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)			

Course Details:

Module 1: [6H]

Multi-D Discrete-Time (Space) Signals and Systems: Representation of Multi-D Signals, Special 2-D Sequences; Multi-D Linear Shift-Invariant Systems, Discrete Convolution; Separable Systems; Implementation and Computational Cost; Fourier Representation of Multi-D Discrete-Time Signals and Systems

Module 2: [6H]

Multi-D Sampling: The Sampling Theorem, Reconstruction; Rectangular Sampling; General Periodic Multi-D Sampling; 2-D Hexagonal Sampling; Sampling Density, The Nyquist Density; Processing Signals Sampled on Arbitrary Lattices

Module 3: [10H]

Multi-D Discrete Fourier Transform (DFT)
Computable Transform for Multi-D Finite-Length Signals; Properties: Periodicity, Discrete Fourier Series; Rectangular Discrete Fourier Transform; Circular Convolution; Implementation: Direct, Row-Column Decomposition; Multi-D Vector-Radix Fast Fourier Transform; Computational Complexity and Storage Issues; General DFT for Signals Sampled on Arbitrary Lattices; Discrete Cosine Transform (DCT) and relation to DFT

Module 4: [10H]

Multi-D Finite Impulse Response (FIR) Digital Filters
Direct Implementation, DFT-based implementation, Block Processing; Window-based Designs; Optimal Least-Squares Designs; Optimal Constrained Designs; Fast Design and Realization Using Transformations
Multi-D Infinite Impulse Response (IIR) Digital Filters
Two-D Difference Equations, Recursive Computability; Z-Transform: Definition, Region of Convergence, Properties; System Functions, Stability Analysis; Implementation: Recursive, Iterative

Module 5: [8H]

Processing of Propagating Space-Time Signals:
Space-Time Signals, Plane Waves; Space-Time Filtering; Array Processing, Beamforming; Weighted Delay and Sum Beamformer; Seismic Migration, Geophysical Processing
Multi-D Signal Restoration and Reconstruction:
Reconstruction from Projections, Back-Projection Algorithm; Reconstruction from Phase or Magnitude

Suggested Textbooks:

1. D. Dudgeon and R. Mersereau, Multidimensional Digital Signal Processing, Prentice-Hall.
2. Jae S. Lim. 1990. Two-Dimensional Signal and Image Processing. Prentice-Hall, Inc., Upper Saddle River, NJ, USA.

Indian Institute of Information Technology, Design & Manufacturing Jabalpur

Ratifications of the approval of the Chairperson, Senate

Approval UG & PG Result

S. No	Particulars	Date of Approval	Remarks
	Semester – I, 2017-18		
1.	Approval of Special Semester (Optional Project) of 2016 B.Tech	22-08-2017	
2.	Approval of B.Tech & B.Des 2017	20-12-2017	
3.	Approval of B.Tech & B.Des 2016	20-12-2017	
4.	Approval of B.Tech & B.Des 2015	20-12-2017	
5.	Approval of B.Tech 2014	20-12-2017	
6.	Approval of B.Tech 2013 & 2012	20-12-2017	
7.	Approval of All M.Tech & M.Des	20-12-2017	
8.	Approval of Dual Degree	20-12-2017	
9.	Approval of All Ph.D.	20-12-2017	
10.	Approval of APEC for UG	20-12-2017	
11.	Approval of APEC for PG	20-12-2017	
	Semester II, 2017-18		
12.	Approval of B.Tech & B.Des 2016	30-05-2018	
13.	Approval of B.Tech & B.Des 2015	08-06-2018	
14.	Approval of B.Tech & B.Des 2017	04-06-2018	
15.	Approval of B.Tech 2014	04-06-2018	
16.	Approval of B.Tech 2013	08-06-2018	
17.	Approval of Ph.D. Batch 2011 to 2017	04-06-2018	
18.	Approval of M.Tech & M.Des 2016	04-06-2018	
19.	Approval of M.Tech & M.Des 2017	04-06-2018	
20.	Approval of Dual Degree	13-06-2018	
21.	Approval of APEC for UG	26-06-2018	
22.	Approval of APEC for PG	04-07-2018	
23.	Approval of Summer Result UG (B.Tech/B.Des)	07-08-2018	
24.	Approval of Special Semester (Optional Project) of 2016 & 2017 B.Tech	05-08-2018	

New Course Approval

S. No	Particulars	Date of Approval	Remarks
1.	Approval of PG Course with evaluation scheme	09-11-2017	
2.	Approval of Course ES307a Number Theory and Cryptography	04-01-2018	
3.	Approval of Course EM667d Fundamentals of Deep Learning	04-01-2018	
4.	Approval of Course ES306b Sensing Methods and Devices	04-01-2018	

5.	Approval of Course CS303L Professional Lab III	04-01-2018	
6.	Approval of Course EM604e Approaches for Distributed Systems	24-01-2018	
7.	Approval of Course EM602f Advanced in Kernel Methods	24-01-2018	
8.	Approval of Course EM641 VLSI Design	24-01-2018	
9.	Approval of Course ME205 Engineering Materials	31-01-2018	

Other Approval

S. No	Particulars	Date of Approval	Remarks
1.	Permission to carryout Ph.D. defence examination of Mr. Jitendra Singh Thakur (Roll No. 1210162) with Prof. Ashish Ghosh, Professor ISI Kolkata, as the external examiner	31-07-2017	
2.	External category of Mr. Rohit Ahuja (1220183)	09-08-2017	
3.	External category of Mr. Sunil Kumar Pandey (1210270)	25-08-2017	
4.	Case of Cheating of Mr. Kotakonda (2015129)	30-11-2017	
5.	Approval for substitute DS328 Design Forecasting and Trend Research with MN302 Fabrication Project for B.Des 6th Semester	04-01-2018	
6.	Approval Grading pattern of PBI evaluation (For external Internship)	04-01-2018	
7.	Approval for restoration of 14 students of their Academic Programme against Academic Drop for Semester I, 2017-18	04-01-2018	
8.	Approval as external category of Mr. Nirmal Kumar (Roll No. 1610418)	09-01-2018	
9.	Approval of change of grades	17-01-2018	
10.	Approval for Resolution by circulation- Academic drop cases	18-01-2018	
11.	Application of Ms. Priyabrata Das regarding her fellowship from Institute to Project	15-01-2018	
12.	Approval of additional course for 6 students for Semester II, 2017-18	16-01-2018	
13.	Approval of Seat Matrix UG & PG	06-03-2018	
14.	Approval of Academic Calendar	06-04-2018	
15.	An application of Mr. Surjeesh Laishram (Roll No. 1320402) regarding extension one month for reviewing his thesis	06-04-2018	
16.	An application for semester drop of Ms. Priyanka (Roll No. 1626502) *(Not Approved)*	23-01-2018	
17.	Approval for Duplicate Degree of Mr. Harshad Uday Lalit (Roll No. 2006029)	07-03-2018	
18.	Approval of late submission of thesis of Mr. Durwesh Jhodkar (1220362) Ph.D.	06-04-2018	
19.	Approval of Withdrawl from Ph.D. Programme of Mr. Aman Chetani	22-05-2018	
20.	Approval of Personality Development Fee of Rs. 3,000/- in existing fee structured from newly students (UG and PG) from this year onwards	25-06-2018	
21.	Approval for Resolution by circulation- Academic drop cases	16-08-2018	

22.	Approval of not to drop a course as students have secured CPI of 5.0 or above	18-08-2018	
23.	Approval for Guidelines of Optional Project	28-08-2018	
24.	Approval to increase the limit of Load Ph.D. Supervision	25-08-2018	

Approval of Ph.D. Thesis

S. No	Particulars	Date of Approval	Remarks
1.	JUNED AHMED SIDDIQUI	28-08-2017	
2.	AKHILESH KUMAR CHOUDHARY	28-08-2017	
3.	RAJIV DEY	25-09-2017	
4.	RAVINDRA SINGH	09-11-2017	
5.	PRABHAT KUMAR	10-01-2018	
6.	ABHAY MALHARRAO KHALATKAR	12-01-2018	
7.	LOKESH KUMAR BRAMHANE	16-03-2018	
8.	SACHIN AGRAWAL	16-03-2018	
9.	KAUSHAL KUMAR NIGAM	18-04-2018	
10.	DHARMENDRA SINGH YADAV	18-04-2018	
11.	NITIN UPADHYAY (Roll No. 1410362)	13-07-2018	
12.	GYAN SINGH YADAV (Roll No. 1220181)	29-06-2018	
13.	KANCHAN LATA KASHYAP	04-06-2018	
14.	RAVI DUTT GUPTA	20-06-2018	
15.	NIDHI GUPTA	04-06-2018	
16.	VINAY KUMAR KILLAMSETTY	08-06-2018	
17.	TAPAS BAJPAI	08-08-2018	
18.	ACHIN SRIVASTAVA	22-06-2018	
19.	HARKEERAT KAUR (ROLL NO. 1220131)	08-08-2018	
20.	VANDANA ARORA (Roll No. 1120363)	31-07-2018	
21.	ROHIT AHUJA (1220183)	10-08-2018	

PDPM
Indian Institute of Information Technology,
Design & Manufacturing Jabalpur

Approval of Results

Ref. No. IIITDMJ/DR (Acad.)/2017
Dated: 21/Aug/2017

Semester- Special Semester
Academic Year: 2016-17
Programme: B.Tech.
Batch: 2016
Disciplines: CSE, ECE and ME

Sl. No.	Course Code	Course Name.	No. of students
1	PR101	Optional Project	115

Recommended for approval of result of PR-101
22/8/17

Dean (Academic)

Dy. Registrar (Academic)

Approved/ ~~Not Approved~~

22/8/17

Chairperson Senate
PDPM IIITDM Jabalpur

PDPM
Indian Institute of Information Technology,
Design and Manufacturing Jabalpur

Swapnali Gadekar
Dy. Registrar (Academic)

IIITDMJ/DR (Acad.)/2017/12/
December 14, 2017

To,
The Chairperson Senate
PDPM IIITDM Jabalpur

Sub: Reg. Approval of result for Semester I, 2017-18 for B.Tech. batch 2017.

Dear Sir,

Kindly find enclosed herewith results for Semester I, 2017-18 of B.Tech. batch2017. The details regarding number of students who were performed in below courses and their results may be declared after approval are as under:

S. No.	Course No	Number of Students
Computer Science & Engineering		
1.	ES101	286
2.	ES102	309
3.	HS101	309
4.	NS101	286
5.	NS102	286
6.	DS103	23
7.	DS104	23
8.	DS105	23

You are requested to kindly approve the attached results.

Recommended for approval
20/12/17

(Swapnali Gadekar)
Dy. Registrar (Academic)

Dean Academic

Chairperson, Senate

You are requested

044

PDPM
Indian Institute of Information Technology,
Design and Manufacturing Jabalpur

Swapnali Gadekar
Dy. Registrar (Academic)

IIITDMJ/DR (Acad.)/2017/12/
December 15, 2017

To,
The Chairperson Senate
PDPM IIITDM Jabalpur

Sub: Reg. Approval of result for Semester I, 2017-18 for B.Tech. batch 2016.

Dear Sir,

Kindly find enclosed herewith results for Semester I, 2017-18 of B.Tech. batch 2016. The details regarding number of students who were performed in below courses and their results may be declared after approval are as under:

S. No.	Course No	Number of Students
1.	CS201	97
2.	CS202	97
3.	ES204	244
4.	MN201	243
5.	NS205d	12
6.	NS205e	18
7.	NS205h	52
8.	NS205i	156
9.	EC201	68
10.	EC202	71
11.	ME201	74
12.	ME202	75
13.	NS101	01
14.	NS102	01
15.	SW44a	06
16.	DS211	24
17.	DS212	24
18.	DS213	24
19.	DS214	24
20.	DS215	24
21.	DS216	24

You are requested to kindly approve the attached results.

Recommended for approval
28/12/17

Dean Academic

(Swapnali Gadekar)
Dy. Registrar (Academic)

Chairperson, Senate

047

PDPM
Indian Institute of Information Technology,
Design and Manufacturing Jabalpur

Swapnali Gadekar
Dy. Registrar (Academic)

IIITDMJ/DR (Acad.)/2017/12/
December 13, 2017

To,
The Chairperson Senate
PDPM IIITDM Jabalpur

Through: Dean Academic

Sub: Reg. Approval of result for Semester I, 2017-18 for B.Tech. and B.Des. batch 2015.

Dear Sir,

Kindly find enclosed herewith results for Semester I, 2017-18 of B.Tech. and B.Des. batch 2015. The details regarding number of students who were performed in below courses and their results may be declared after approval are as under:

Sl. No.	Course No.	Name of Course (Credits)	No of students appeared in exam and their result may declared
1.	**Computer Science and Engineering Discipline**		
1	CS302L	Professional Lab II (2)	99
2	CS306	Operating System (4)	98
3	CS307	Computer Network (4)	98
4	CS308	Software Engineering (4)	98
5	DS302	Engineering Design (5)	**276**
6	MS301	Management: Concepts and Techniques (4)	**278**
2.	**Electronics and Communication Engineering**		
1	DS302	Engineering Design (5)	Common 1 (5)
2	EC302L	Professional Lab II (2)	86
3	EC306	Principle of Communication	93
4	EC307	Fundamentals of Electromagnetic Theorey (4)	92
5	EC308a	Linear Integrated Circuits (4)	48
6	EC308b	Digital Singnal Processing (4)	50
7	ES102	Fundamentals of Computing (4)	287
8	ES204	Digital Electronics (4)	248
9	MS301	Management: Concepts and Techniques (4)	Common 1 (6)
3.	**Mechanical Engineering**		
1	DS302	Engineering Design (5)	Common 1 (6)

2	ME302L	Professional Lab II (2)	90
3	ME306	Design of Mechanical Components (4)	94
4	ME307b	Computational Fluid Dynamics (4)	12
5	ME307d	NC machine Tools (4)	66
6	ME307f	Operation Research (4)	89
7	ME601	Computer Aided Geometric Design (4)	21
8	MS301	Management: Concepts and Techniques (4)	Common 1 (6)
9	NS101	Mathematics I (4)	01
10	NS102	Engineering Mechanics (4)	01
11	SW44a	Heat Treatment and Surface Hardening (2)	01
4.	B.Des.		
1	DS302	Engineering Design (5)	22
2	DS323	Service Design (4)	22
3	DS324	Sustainable Design (4)	22
4	DS325a	Applied Ergonomics (4)	13
5	DS325b	Visual Ergonomics (4)	13
6	DS326	Design Project (4)	22

You are requested to kindly approve the attached results.

Received
30/12/17

(Swapnali Gadekar)
Dy. Registrar (Academic)

Dean Academic

Chairperson, Senate

PDPM
Indian Institute of Information Technology,
Design and Manufacturing Jabalpur

Swapnali Gadekar
Dy. Registrar (Academic)

IIITDMJ/DR (Acad.)/2017/12/
December 20, 2017

To,
The Chairperson Senate
PDPM IIITDM Jabalpur

Sub: Reg. Approval of result for Semester I, 2017-18 for B.Tech. batch 2012, 2013 and 2014.

Dear Sir,

Kindly find enclosed herewith results for Semester I, 2017-18 of B.Tech. batch 2012, 2013 and 2014 for your kind perusal and approval.

You are requested to kindly approve the attached results.

(Swapnali Gadekar)
Dy. Registrar (Academic)

Recommended for appvl
28/12/17

Dean Academic

Chairperson, Senate

PDPM
Indian Institute of Information Technology,
Design and Manufacturing Jabalpur

Swapnali Gadekar
Dy. Registrar (Academic)

IIITDMJ/DR (Acad.)/2017/12/
December 13, 2017

To,
The Chairperson Senate
PDPM IIITDM Jabalpur

Through: Dean Academic

Sub: Reg. Approval of result for Semester I, 2017-18 for M.Tech. and M.Des. batch 2016 & 2017.

Dear Sir,

Kindly find enclosed herewith results for Semester I, 2017-18 of M.Tech. and M.Des. batch 2016 & 2017. The details regarding number of students who were performed in below courses and their results may be declared after approval are as under:

Sl. No.	Course No.	No of students appeared in exam and their result may declared
1	CS599	10
2	CS699	10
3	EC599	25
4	EC699	25
5	ME599	28
6	ME699	29
7	MT599	8
8	MT699	8
9	DS699	31
10	HS501	102
11	ME640	38
12	MT501	03
13	MT502	06
14	MT503	09
15	MT612	18
16	DS543	08
17	DS557	12
18	DS558	12
19	DS566	07
20	DS584	09
21	DS596	24
22	DS600	24
23	EM595c	19
24	EM598c	24
25	CS531	14
26	CS532	14

27	CS534	05
28	CS619	13
29	CS684	13
30	EC451	09
31	EC543	09
32	EC544	09
33	EC545	09
34	EC546l	09
35	EC511	07
36	EC533	07
37	EC534	07
38	EC638	07
39	EC638l	07
40	EC651	07
41	EC422b	09
42	EC521	09
43	EC522	09
44	ME589	30
45	ME590	10
46	ME601	14
47	ME621	25
48	ME640	38
49	ME525	10
50	ME589	30
51	ME592	09
52	ME594	10
53	ME631	10
54	DS531	25
55	DS532	25
56	DS533	25
57	DS541	25
58	DS559	25
59	DS576	25
60	HS501	25

You are requested to kindly approve the attached results.

(Swapnali Gadekar)
Dy. Registrar (Academic)

20/12/17

Dean Academic

Chairperson Senate

PDPM
Indian Institute of Information Technology,
Design and Manufacturing Jabalpur

Swapnali Gadekar
Dy. Registrar (Academic)

IIITDMJ/DR (Acad.)/2017/12/
December 15, 2017

To,
The Chairperson Senate
PDPM IIITDM Jabalpur

Sub: Reg. Approval of result for Semester I, 2017-18 for the students under dual degree programme of batch 2012, 2013 and 2014.

Dear Sir,

Kindly find enclosed herewith results for Semester I, 2017-18 for the students under dual degree programme of batch 2012, 2013 and 2014.

You are requested to kindly approve the attached results.

Recommended for approval
20/12/17

Dean Academic

(Swapnali Gadekar)
Dy. Registrar (Academic)

Chairperson, Senate

PDPM
Indian Institute of Information Technology,
Design and Manufacturing Jabalpur

Swapnali Gadekar
Dy. Registrar (Academic)

IIITDMJ/DR (Acad.)/2017/12/
December 14, 2017

To,
The Chairperson Senate
PDPM IIITDM Jabalpur

Sub: Reg. Approval of result for Semester I, 2017-18 for PhD. batch 2011, 2012, 2013, 2014, 2015, 2016, and 2017.

Dear Sir,

Kindly find enclosed herewith results for Semester I, 2017-18 of PhD. batch 2011, 2012, 2013, 2014, 2015, 2016, and 2017. The details regarding number of students who were performed in below courses and their results may be declared after approval are as under:

S. No.	Course No	Number of Students
1.	CS797	04
2.	CS798	10
3.	CS795	05
4.	CS799	15
5.	EC797	01
6.	EC798	22
7.	EC795	10
8.	EC799	23
9.	ME797	03
10.	ME798	20
11.	ME795	08
12.	ME799	28
13.	MTH797	—
14.	MTH798	03
15.	MTH795	02
16.	MTH799	08
17.	PHY797	01
18.	PHY798	03
19.	PHY795	03
20.	PHY799	08
21.	CS534	01
22.	CS619	01
23.	HS501	15
24.	ME589	03
25.	ME621	01
26.	ME636	02
27.	ME640	03
28.	MT503	02

29.	SW44a	01
30.	NS531	04
31.	NS532	04
32.	MTH603	05
33.	MTH604	05

You are requested to kindly approve the attached results.

Recommended for approval

Dean Academic

21/12/17

(Swapnali Gadekar)
Dy. Registrar (Academic)

Chairperson, Senate

simanta simanta <simanta@iiitdmj.ac.in>

Approval for Result

dracad dracad <dracad@iiitdmj.ac.in> Fri, Dec 22, 2017 at 11:23 AM
To: "dean.acad dean.acad" <dean.acad@iiitdmj.ac.in>, simanta simanta <simanta@iiitdmj.ac.in>

---------- Forwarded message ----------
From: "Sanjeev Deshmukh" <director.jbp@gmail.com>
Date: Dec 20, 2017 10:08 PM
Subject: Re: Approval for Result
To: "dracad dracad" <dracad@iiitdmj.ac.in>
Cc:

Results approved as proposed.
SGD

On 20 December 2017 at 18:27, dracad dracad <dracad@iiitdmj.ac.in> wrote:

Respected Sir,

Please find attached UG/PG results and APEC report of UG/PG programme for Semester I 2017-18. Dean Academic has recommended the results and APEC report. The same may please be approved.

With Kind Regards.

Swapnali Gadekar
Deputy Registrar (Academic & Students)
PDPM Indian Institute of Information Technology,
Design and Manufacturing Jabalpur (MP)-482005

PDPM
Indian Institute of Information Technology,
Design & Manufacturing Jabalpur

Swapnali Gadekar
Dy. Registrar (Academic)

IIITDMJ/Dean (Acad.)/2017/12/
December 20, 2017

To,
The Chairperson Senate
PDPM IIITDM Jabalpur

Through: Dean Academic

Recommended for approval
20/12/17

Sub: Academic Performance Evaluation Report upto Semester I, 2017-18.

Dear Sir,

Academic Performance Evaluation Report (APEC) of UG students of Batch 2017, 2016, 2015, 2014, 2013, 2012 upto Semester I, 2017-18 is put up for approval and perusal, please.

(Swapnali Gadekar)

Encl: APEC for Batch 2017, 2016, 2015, 2014, 2013 and 2012

PDPM
Indian Institute of Information Technology,
Design & Manufacturing Jabalpur

Swapnali Gadekar
Dy. Registrar (Academic)

IIITDMJ/Dean (Acad.)/2017/12/
December 20, 2017

To,
The Chairperson Senate
PDPM IIITDM Jabalpur

Recommended for approval
20/12/17

Through: Dean Academic

Sub: Academic Performance Evaluation Report upto Semester I, 2017-18.

Dear Sir,

Academic Performance Evaluation Report (APEC) of PG students of Batch 2011, 2012, 2013, 2014, 2015, 2016 and 2017 upto Semester I, 2017-18 is put up for approval and perusal, please.

(Swapnali Gadekar)

Encl: APEC for Batch 2011, 2012, 2013, 2014, 2015, 2016 and 2017

praveen praveen <praveen@iiitdmj.ac.in>

Approval of result for Semester II, 2017-2018 for B. Tech. batch 2016

santosh santosh <santosh@iiitdmj.ac.in> Wed, May 30, 2018 at 2:50 PM
To: richard <richard@iiitdmj.ac.in>, praveen praveen <praveen@iiitdmj.ac.in>
Cc: "dean.acad dean.acad" <dean.acad@iiitdmj.ac.in>, rizwan rizwan <rizwan@iiitdmj.ac.in>, simanta simanta <simanta@iiitdmj.ac.in>, sawasthi sawasthi <sawasthi@iiitdmj.ac.in>, ntripathi ntripathi <ntripathi@iiitdmj.ac.in>

धन्यवाद,

संतोष महोबिया/Santosh Mahobia
सहायक कुलसचिव/Assistant Registrar
सामान्य प्रशासन, आं.अंकेक्षण,राजभाषा,जनसूचना अधिकारी / (G.A., I.A., O.L. & CPIO)
PDPM-IIITDM जबलपुर (म.प्र.)
0761-2794063

---------- Forwarded message ----------
From: **Sanjeev Deshmukh** <director.jbp@gmail.com>
Date: Wed, May 30, 2018 at 2:45 PM
Subject: Re: Approval of result for Semester II, 2017-2018 for B. Tech. batch 2016
To: santosh santosh <santosh@iiitdmj.ac.in>

Approved as proposed by Dean (Acad)
SGD

On 30 May 2018 at 13:15, santosh santosh <santosh@iiitdmj.ac.in> wrote:

To,
Chairperson Senate
PDPM-IIITDM Jabalpur

3687
30.5.18
Dean (A)

Respected Sir,

Please find attached request for **approval of result** for Semester II, 2017-2018 for B. Tech. batch 2016.

Result sheet prepared for B.Tech batch 2016 CSE-ECE-ME-Design discipline is attached.

Same is checked and recommended by Dean Academic for approval please.

PDPM
Indian Institute of Information Technology,
Design and Manufacturing Jabalpur

Rizwan Ahmed
Assistant Registrar (Academic)

IIITDMJ/AR (Acad.)/2018/05/312
May 29, 2018

To,
The Chairperson Senate
PDPM IIITDM Jabalpur

Sub: Reg. Approval of result for Semester II, 2017-18 for B.Tech. batch 2016.

Dear Sir,

Kindly find enclosed herewith results for Semester II, 2017-18 of B.Tech. batch 2016. The details regarding number of students who have performed in below courses and their results may be declared after approval are as under:

S. No.	Course No	Name of Course	No. of Students
1.	CS203	COMPUTER ORGANIZATION AND ARCHITECTURE	97
2.	CS204	DESIGN AND ANALYSIS OF ALGORITHM	97
3.	CS205	DATA COMMUNICATION	96
4.	CS206L	LAB BASED PROJECT 1	96
5.	ES205	FUNDAMENTALS OF ROBOTICS	244
6.	MS201	MANAGEMENT CONCEPTS AND TECHNOLOGY	242
7.	NS103	MATHEMATICS II	1
8.	SW21a	MATHEMATICAL METHODS AND TECHNIQUES IN SIGNAL PROC	29
9.	EC203	NETWORK ANALYSIS AND SYNTHESIS	71
10.	EC204	SIGNALS AND SYSTEMS	69
11.	EC205	MICROPROCESSOR AND INTERFACING	71
12.	EC206L	MICROPROCESSOR ELECTRONICS	71
13.	ME203	THERMODYNAMICS	75
14.	ME204	SOLID MECHANICS	76
15.	ME205	ENGG MATERIAL	76
16.	ME206L	THERMODYNAMICS SOLID MECHANICS	76
17.	DS217	DESIGN RESEARCH INCLUDING USER STUDY	24
18.	DS218	PACKAGING DESIGN AND BRANDING	24
19.	DS219	MATERIALS AND PROCESSES	24
20.	DS220	INDUSTRIAL DESIGN 2 (COMPULSORY)	24
21.	DS221	COMMUNICATION DESIGN 2 (COMPULSORY)	24
22.	DS222	DESIGN PROJECT 3	24

You are requested to kindly approve the attached results.

29/05/18
(Rizwan Ahmed)
Assistant Registrar (Academic)

29/5/18
Dean Academic

Chairperson, Senate

praveen praveen <praveen@iiitdmj.ac.in>

Approval of result for Semester II, 2017-2018 of B. Tech/B. Des. Batch 2015 CSE/ECE/ME/ discipline.

2 messages

praveen praveen <praveen@iiitdmj.ac.in> Fri, Jun 8, 2018 at 4:24 PM
To: registrar registrar <registrar@iiitdmj.ac.in>

Respected Sir,

Please find attached request for **approval of result** for Semester II, 2017-2018 of B. Tech/B. Des. Batch 2015 CSE/ECE/ME/ discipline.

Result sheet prepared for B. Tech/B. Des. Batch 2015 CSE/ECE/ME/ discipline.

Same is checked and recommended by Dean Academic for approval please.

Put up for perusal and orders please.

Result B. Tech,B. Des batch 2015 (4).pdf
168K

registrar registrar <registrar@iiitdmj.ac.in> Fri, Jun 8, 2018 at 6:00 PM
To: "dean.acad dean.acad" <dean.acad@iiitdmj.ac.in>, prabin16 prabin16 <prabin16@iiitdmj.ac.in>, richard richard <richard@iiitdmj.ac.in>, praveen praveen <praveen@iiitdmj.ac.in>

---------- Forwarded message ---------
From: Sanjeev Deshmukh <director.jbp@gmail.com>
Date: Fri, Jun 8, 2018, 17:59
Subject: Re: Approval of result for Semester II, 2017-2018 of B. Tech/B. Des. Batch 2015 CSE/ECE/ME/ discipline.
To: registrar registrar <registrar@iiitdmj.ac.in>

Dean(A)

3672
11.6.18

Approved as proposed
SGD

On 8 June 2018 at 16:28, registrar registrar <registrar@iiitdmj.ac.in> wrote:

Respected Sir,

05

PDPM
Indian Institute of Information Technology,
Design and Manufacturing Jabalpur

Rizwan Ahmed
Assistant Registrar (Academic)

IIITDMJ/DR (Acad.)/2018/06/ 299
May 31, 2018
08/06/18

To,
The Chairperson Senate
PDPM IIITDM Jabalpur

Sub: Reg. Approval of result for Semester II, 2017-18 for B.Tech./B.Des. batch 2015 (CSE/ECE/ME discipline).

Dear Sir,

Kindly find enclosed herewith results for Semester II, 2017-18 of B.Tech./B.Des. batch 2015 (ECE/CSE discipline). The details regarding number of students who have performed in below courses and their results may be declared after approval are as under:

S. No.	Course No	Name of Course	No. of Students
1.	CS615	MACHINE LEARNING	67
2.	EC303L	PROFESSIONAL LAB-III	86
3.	EC309a	ANALOG IC DESIGN	46
4.	EC309b	ANTENNA THEORY AND DESIGN	40
5.	EC310a	VLSI - IC DESIGN	85
6.	ES306b	SENSING METHODS AND DEVICES	59
7.	ES307a	NUMBER THEORY AND CRYPTOGRAPHY	116
8.	HS303	SOFT SKILLS AND THE USE OF ENGLISH LANGUAGE	176
9.	HS601	INDIAN PHILOSOPHY AND LITERATURE IN ENGLISH	84
10.	ME688	BIOMATERIAL SCIENCE AND TECHNOLOGY	98
11.	MN302	FABRICATION PROJECT	274
12.	ES306b	SENSING METHODS AND DEVICES	59
13.	ME201	THERMODYNAMICS	7
14.	ME303L	PROFESSIONAL LAB-III	90
15.	ME309a	FINITE ELEMENT METHODS	59
16.	ME309b	VIBRATIONS OF MECHANICAL SYSTEMS	32
17.	ME309d	ADVANCED HEAT TRANSFER	19
18.	ME612	RAPID PRODUCT DEVELOPMENT TECHNOLOGIES	10
19.	ME615	COMPUTER INTEGRATED MANUFACTURING SYSTEMS	12
20.	ME642	ADVANCED MANUFACTURING PROCESS AND TECHNOLOGIES	46

21.	ME688	BIOMATERIAL SCIENCE AND TECHNOLOGY	98
22.	MS201	MANAGEMENT CONCEPTS AND TECHNOLOGY	247
23.	DS301	COMPUTER AIDED PROCESS AND PLANNING	22
24.	DS327	INTERFACE DESIGN	22
25.	DS328	DESIGN FORECASTING AND TREND RESEARCH	13
26.	DS329	DESIGN MANAGEMENT	22
27.	DS330a	INDUSTRIAL DESIGN	17
28.	DS330b	COMMUNICATION DESIGN	14
29.	HS304	ENVIRONMENTAL SCIENCE	22
30.	HS601	INDIAN PHILOSOPHY AND LITERATURE IN ENGLISH	87
31.	MN302	FABRICATION PROJECT	296
32.	CS202	COMPUTER SYSTEM ORGANISATION AND ARCHITECTURE	1
33.	CS314d	COMPOILER DESIGN	17
34.	CS608	MOBILE AND WIRELESS NETWORKS	9
35.	CS621	IMAGE PROCESSING	43
36.	CS631	PARALLEL ALGORITHMS	52
37.	EM601h	DEPENDABLE COMPUTING	5
38.	EM602f	ADVANCES IN KERNEL METHODS	7
39.	EM604e	MIDDLEWARE APPROACHES FOR DISTRIBUTED SYSTEMS	3
40.	EM609e	CYBER SECURITY	5
41.	EM641	VLSI SECURITY	2
42.	EM668g	SOFTWARE QUALITY ASSURANCE	6
43.	HS688	BIOMATERIAL SCIENCE AND TECHNOLOGY	84
44.	MN302	FABRICATION PROJECT	274
45.	NS103	MATHEMATICS II	1

You are requested to kindly approve the attached results.

8.6.18
(Rizwan Ahmed)
Assistant Registrar (Academic)

8/6/18
Dean Academic

Chairperson, Senate

IIITDM JABALPUR

richard richard <richard@iiitdmj.ac.in>

Fwd: Approval of result for Semester II, 2017-2018 of B. Tech and B. Des. batch 2017

1 message

santosh santosh <santosh@iiitdmj.ac.in> Mon, Jun 4, 2018 at 10:53 PM
To: richard <richard@iiitdmj.ac.in>, praveen praveen <praveen@iiitdmj.ac.in>
Cc: "dean.acad dean.acad" <dean.acad@iiitdmj.ac.in>, rizwan rizwan <rizwan@iiitdmj.ac.in>

---------- Forwarded message ---------
From: Sanjeev Deshmukh <director.jbp@gmail.com>
Date: Mon, Jun 4, 2018, 7:15 PM
Subject: Re: Approval of result for Semester II, 2017-2018 of B. Tech and B. Des. batch 2017
To: santosh santosh <santosh@iiitdmj.ac.in>

Approved as proposed by Dean(acad)
SGD

On 4 June 2018 at 15:56, santosh santosh <santosh@iiitdmj.ac.in> wrote:

> Respected Sir,
>
> Please find attached request for **approval of result** for Semester II, 2017-2018 for B. Tech and B. Des batch 2017.
>
> Result sheet prepared for **B. Tech and B Des. batch 2017.**
>
> Same is checked and recommended by Dean Academic for approval please.
>
> Put up for perusal and orders please.
>
> धन्यवाद,
>
> संतोष महोबिया/Santosh Mahobia
> For D.R.Dir
>
> ---------- Forwarded message ----------
> From: **praveen praveen** <praveen@iiitdmj.ac.in>
> Date: Mon, Jun 4, 2018 at 3:48 PM
> Subject: Approval of result for Semester II, 2017-2018 of B. Tech and B. Des. batch 2017
> To: santosh santosh <santosh@iiitdmj.ac.in>
>
> Respected Sir,
>
> Please find attached request for **approval of result** for Semester II, 2017-2018 for B. Tech and B. Des batch 2017.
>
> Result sheet prepared for B. Tech and B Des. batch 2017.
>
> Same is checked and recommended by Dean Academic for approval please.
>
> Put up for perusal and orders please.

050

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

Rizwan Ahmed
Assistant Registrar (Academic)

IIITDMJ/AR(Acad.)/2018/05/ए ७ ५५
Date: May 31, 2018

To,
The Chairperson Senate
PDPM-IIITDM Jabalpur

Sub: Approval of result of Semester II, 2017-18 of B.Tech & B.Des batch 2017.

The details regarding number of students who have performed in below courses and their results may be declared after approval:

S. No.	Course No	Name of Course	No. of Students
1.	DS101	Engineering Graphics	307
2.	ES103	Data Structure and Algorithms	285
3.	HS102	Culture and Human Values	281
4.	NS103	Mathematics II	285
5.	NS104	Electrodynamics and Optics	285
6.	DS106	Design Fundamentals	22
7.	DS107	Introduction to Ergonomics in Design	22
8.	DS108	Representation Techniques	22
9.	DS109	Software Skills	22
10.	DS110	Design Project 1	22

You are requested to kindly approve the attached results.

31/5/18 3105/18

(Rizwan Ahmed)
Assistant Registrar (Academic)

Recommended for approval
31/5/18

Dean Academic

Chairperson Senate

निदेशक महोदय द्वारा ई-मेल से
स्वीकृति प्राप्त, प्रतिलिपि संलग्न है।

IIITDM JABALPUR

richard richard <richard@iiitdmj.ac.in>

Fwd: Approval of result for Semester II, 2017-2018 for B. Tech batch 2014.

1 message

santosh santosh <santosh@iiitdmj.ac.in> Mon, Jun 4, 2018 at 10:53 PM
To: richard <richard@iiitdmj.ac.in>, praveen praveen <praveen@iiitdmj.ac.in>
Cc: "dean.acad dean.acad" <dean.acad@iiitdmj.ac.in>, rizwan rizwan <rizwan@iiitdmj.ac.in>

---------- Forwarded message ---------
From: Sanjeev Deshmukh <director.jbp@gmail.com>
Date: Mon, Jun 4, 2018, 7:16 PM
Subject: Re: Approval of result for Semester II, 2017-2018 for B. Tech batch 2014.
To: santosh santosh <santosh@iiitdmj.ac.in>

Approved as proposed by Dean(acad)
SGD

On 4 June 2018 at 15:40, santosh santosh <santosh@iiitdmj.ac.in> wrote:

> Respected Sir,
> Please find attached request for **approval of result** for Semester II, 2017-2018 for B. Tech batch 2014.
>
> Result sheet prepared for B. Tech batch 2014 is attached.
>
> Same is checked and recommended by Dean Academic for approval please.
>
> Put up for perusal and orders please.
>
> धन्यवाद,
>
> संतोष महोबिया/Santosh Mahobia
> For D R Dir
>
> ---------- Forwarded message ----------
> From: **praveen praveen** <praveen@iiitdmj.ac.in>
> Date: Mon, Jun 4, 2018 at 3:38 PM
> Subject: Approval of result for Semester II, 2017-2018 for B. Tech batch 2014.
> To: santosh santosh <santosh@iiitdmj.ac.in>
>
> Respected Sir,
>
> Please find attached request for **approval of result** for Semester II, 2017-2018 for B. Tech batch 2014.
>
> Result sheet prepared for B. Tech batch 2014.
>
> Same is checked and recommended by Dean Academic for approval please.
>
> Put up for perusal and orders please.

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

Rizwan Ahmed
Assistant Registrar (Academic)

IIITDMJ/AR(Acad.)/2018/06/
Date: June 4, 2018

To,
The Chairperson Senate
PDPM-IIITDM Jabalpur

Sub: Approval of result of Semester II, 2017-18 of B.Tech batch 2014.

Kindly find enclosed herewith result for Semester II, 2017-18 of B.Tech batch 2014. The details regarding number of students who have performed in below courses and their results may be declared after approval:

S. No.	Course No	Name of Course	No. of Students
1.	CS615	MACHINE LEARNING	09
2.	CS314d	COMPLILER DESIGN	55
3.	CS404L	PROFESSIONAL LAB IV	84
4.	CS608	MOBILE AND WIRELESS NETWORKS	39
5.	CS621	IMAGE PROCESSING	51
6.	CS631	PARALLEL ALGORITHMS	03
7.	EM601h	DEPENDABLE COMPUTING	21
8.	EM602c	NATURAL LANGUAGE TEXT PROCESSING	64
9.	EM602f	ADVANCES IN KERNEL METHODS	34
10.	EM602g	INTRODUCTION TO DEEP LEARNING	45
11.	EM604e	MIDDLEWARE APPROACHES FOR DISTRIBUTED SYSTEMS	19
12.	EM609e	CYBER SECURITY	54
13.	EM641	VLSI DESIGN	01
14.	EM668g	SOFTWARE QUALITY ASSURANCE	49
15.	MS201	MANAGEMENT CONCEPTS AND TECHNOLOGY	01
16	NP02b	PRIVACY AND SECURITY IN ONLINE SOCIAL NETWORKS	02
17.	EC310a	VLSI - IC DESIGN	02
18.	EC311a	RF AND MICROWAVE ENGINEERING	58
19.	EC311b	POWER ELECTRONICS	22
20.	EC312a	DIGITAL COMMUNICATION	80
21.	EC313b	OPTICAL AND WIRELESS COMMUNICATION	80
22.	EC404L	PROFESSIONAL LAB IV	80
23.	ME688	BIOMATERIAL SCIENCE AND TECHNOLOGY	48
24.	MS302	BUSINESS ANALYTICS	248
25.	NS103	MATHEMATICS II	03
26.	ME311e	ENERGY CONVERSION DEVICES	79
27.	ME404L	PROFESSIONAL LAB IV	84
28.	ME611	NC-CNC MACHINE TOOLS AND PROGRAMMING	04
29.	ME642	ADVANCED MANUFACTURING PROCESS & TECHNOLOGIES	01
30.	ME651	INDUSTRIAL INSTRUMENTATION AND METROLOGY	19
31.	ME686	MEMS: MICROFABRICATION AND APPLICATION	77
32.	ME687	SMART MATERIALS AND STRUCTURE	29
33.	NP44a	ADVANCED MANUFACTURING PROCESS FOR MICRO SYSTEM FABRICATION	04

You are requested to kindly approve the attached results.

(Rizwan Ahmed)
Assistant Registrar (Academic)

Dean Academic

Chairperson Senate

praveen praveen <praveen@iiitdmj.ac.in>

Approval of result for Semester II, 2017-2018 of B. Tech Batch 2013.

2 messages

praveen praveen <praveen@iiitdmj.ac.in>
To: registrar registrar <registrar@iiitdmj.ac.in> Fri, Jun 8, 2018 at 4:20 PM

Respected Sir,

Please find attached request for **approval of result** for Semester II, 2017-2018 of B. Tech Batch 2013.

Result sheet prepared for B. Tech Batch 2013.

Same is checked and recommended by Dean Academic for approval please.

Put up for perusal and orders please.

Regards,

Result B. Tech batch 2013.pdf
87K

registrar registrar <registrar@iiitdmj.ac.in>
To: "dean.acad dean.acad" <dean.acad@iiitdmj.ac.in>, prabin16 prabin16 <prabin16@iiitdmj.ac.in>, praveen praveen <praveen@iiitdmj.ac.in>, richard richard <richard@iiitdmj.ac.in> Fri, Jun 8, 2018 at 6:00 PM

3671
11.6.18

---------- Forwarded message ---------
From: Sanjeev Deshmukh <director.jbp@gmail.com>
Date: Fri, Jun 8, 2018, 17:59
Subject: Re: Approval of result for Semester II, 2017-2018 of B. Tech Batch 2013.
To: registrar registrar <registrar@iiitdmj.ac.in>

Dean (A)

Approved as proposed
SGD

On 8 June 2018 at 16:28, registrar registrar <registrar@iiitdmj.ac.in> wrote:

059

Indian Institute of Information Technology,
Design & Manufacturing, Jabalpur

Rizwan Ahmed
Assistant Registrar (Academic)

IIITDMJ/AR(Acad.)/2018/06/
Date: June 8, 2018

To,
The Chairperson Senate
PDPM-IIITDM Jabalpur

Sub: Approval of result of Semester II, 2017-18 of B.Tech batch 2013.

The details regarding number of students who have performed in below courses and their results may be declared after approval:

S. No.	Course No	Name of Course	No. of Students
1.	ES306b	Sensing Methods and Devices	02
2.	HS303	Soft Skills and The Use of English Language	02
3.	NS104	Electrodynamics and Optics	03
4.	ME203	Thermodynamics	01
5.	ME205	Engg. Material	01
6.	ME303L	Professional Lab-III	01
7.	ME309a	Finite Elements Methods	01
8.	ME311e	Energy Conversion Devices	02
9.	ME404L	Professional Lab-IV	01
10.	ME615	Computer Integrated Manufacturing System	04
11.	ME651	Industrial Instrumentation and Metrology	01
12.	ME688	Biomaterial Science and Technology	05
13.	ME201	Management Concepts and Technology	01
14.	MS302	Business Analytics	02

You are requested to kindly approve the attached results.

8/6/18

(Rizwan Ahmed)
Assistant Registrar (Academic)

8/6/18

Dean Academic

Chairperson Senate

IIITDM 3712

richard richard <richard@iiitdmj.ac.in>

Fwd: Approval of result for Semester II, 2017-2018 for Ph.D. from batch 2011 to batch 2017.

1 message

santosh santosh <santosh@iiitdmj.ac.in> Mon, Jun 4, 2018 at 10:52 PM
To: richard <richard@iiitdmj.ac.in>, praveen praveen <praveen@iiitdmj.ac.in>
Cc: "dean.acad dean.acad" <dean.acad@iiitdmj.ac.in>, rizwan rizwan <rizwan@iiitdmj.ac.in>

---------- Forwarded message ---------
From: Sanjeev Deshmukh <director.jbp@gmail.com>
Date: Mon, Jun 4, 2018, 7:15 PM
Subject: Re: Approval of result for Semester II, 2017-2018 for Ph.D. from batch 2011 to batch 2017.
To: santosh santosh <santosh@iiitdmj.ac.in>

oved as proposed
SGD

On 4 June 2018 at 15:58, santosh santosh <santosh@iiitdmj.ac.in> wrote:

Respected Sir,

Please find attached request for **approval of result** for Semester II, 2017-2018 for Ph.D. from batch 2011 to batch 2017.

Result sheet prepared for Ph.D. from batch 2011 to batch 2017 CSE-ECE-ME-Physics - Mathematics discipline is attached.

Same is checked and recommended by Dean Academic for approval please.

Put up for perusal and orders please.

धन्यवाद,

संतोष महोबिया/Santosh Mahobia
For D R Dir

---------- Forwarded message ---------
From: **praveen praveen** <praveen@iiitdmj.ac.in>
Date: Mon, Jun 4, 2018 at 3:57 PM
Subject: Approval of result for Semester II, 2017-2018 for Ph.D. from batch 2011 to batch 2017.
To: santosh santosh <santosh@iiitdmj.ac.in>

Respected Sir,

Please find attached request for **approval of result** for Semester II, 2017-2018 for Ph.D. from batch 2011 to batch 2017.

Result sheet prepared for Ph.D. from batch 2011 to batch 2017 CSE-ECE-ME-Physics - Mathematics discipline is attached.

Same is checked and recommended by Dean Academic for approval please.

060

PDPM
Indian Institute of Information Technology,
Design and Manufacturing Jabalpur

Rizwan Ahmed
Assistant Registrar (Academic)

IIITDMJ/AR (Acad.)/2018/05/ 275
May 31, 2018

To,
The Chairperson Senate
PDPM IIITDM Jabalpur

Through: Dean Academic

Sub: Reg. Approval of results (Semester II, 2017-18) for Ph.D. from Batch 2011 to Batch 2017.

Dear Sir,

Kindly find enclosed herewith results for Semester II, 2017-18 of Ph.D. from Batch 2011 to 2017 in the following discipline:

1. Computer Science & Engineering
2. Electronics and Communication Engineering
3. Mechanical Engineering
4. Physics
5. Mathematics

You are requested to kindly approve the attached results of above from Batch 2011 to Batch 2017 .

(Rizwan Ahmed)
Assistant Registrar (Academic)

Recommended for approval
31/5/18

Dean Academic

Chairperson Senate

निदेशक महोदय द्वारा ई-मेल से
स्वीकृति प्राप्त, प्रतिलिपि संलग्न है।

richard richard <richard@iiitdmj.ac.in>

Fwd: Approval of result for Semester II, 2017-2018 for M. Tech and M. Des. batch 2016

1 message

santosh santosh <santosh@iiitdmj.ac.in> Mon, Jun 4, 2018 at 10:52 PM
To: praveen praveen <praveen@iiitdmj.ac.in>, richard <richard@iiitdmj.ac.in>
Cc: "dean.acad dean.acad" <dean.acad@iiitdmj.ac.in>, rizwan rizwan <rizwan@iiitdmj.ac.in>

---------- Forwarded message ---------
From: Sanjeev Deshmukh <director.jbp@gmail.com>
Date: Mon, Jun 4, 2018, 7:14 PM
Subject: Re: Approval of result for Semester II, 2017-2018 for M. Tech and M. Des. batch 2016
To: santosh santosh <santosh@iiitdmj.ac.in>

Approved as proposed by Dean (acad)
SGD

On 4 June 2018 at 16:24, santosh santosh <santosh@iiitdmj.ac.in> wrote:

> Respected Sir,
>
> Please find attached request for approval of result for Semester II, 2017-2018 for M.Tech and M.Des. batch 2016.
>
> Result sheet prepared for M. Tech and M. Des. batch 2016 CSE-ECE-ME-Mechatronics - Design discipline is attached.
>
> Same is checked and recommended by Dean Academic for approval please.
>
> Put up for perusal and orders please.
>
> धन्यवाद,
>
> संतोष महोबिया/Santosh Mahobia
> सहायक कुलसचिव/Assistant Registrar
> For D R Dir/F&A
>
> ---------- Forwarded message ----------
> From: **praveen praveen** <praveen@iiitdmj.ac.in>
> Date: Mon, Jun 4, 2018 at 3:42 PM
> Subject: Approval of result for Semester II, 2017-2018 for M. Tech and M. Des. batch 2016
> To: santosh santosh <santosh@iiitdmj.ac.in>
>
> Respected Sir,
>
> Please find attached request for approval of result for Semester II, 2017-2018 for M.Tech and M.Des. batch 2016.
>
> Result sheet prepared for M. Tech and M. Des. batch 2016 CSE-ECE-ME-Mechatronics - Design discipline is attached.

3711/2018

061

PDPM
Indian Institute of Information Technology,
Design and Manufacturing Jabalpur

Rizwan Ahmed
Assistant Registrar (Academic)

IIITDMJ/AR (Acad.)/2018/05/2772
May 30, 2017

To,
The Chairperson Senate
PDPM IIITDM Jabalpur

Through: Dean Academic

Sub: Reg. Approval of results (Semester II, 2017-18) for M.Tech. and M.Des. batch 2016 .

Dear Sir,

Kindly find enclosed herewith results for Semester II, 2017-18 of M.Tech. and M.Des. batch 2016 in following discipline:

1. Computer Science & Engineering
2. Electronics and Communication Engineering
3. Mechanical Engineering
4. Mechatronics
5. Design

You are requested to kindly approve the attached results of above batch 2016.

(Rizwan Ahmed)
Assistant Registrar (Academic)

Recommended for appl.
Grade
31/5/18

Dean Academic

Chairperson Senate

3711
5/6/18

निदेशक महोदय द्वारा ई-मेल से
स्वीकृति प्राप्त, प्रतिलिपि संलग्न है।

IIITDM

richard richard <richard@iiitdmj.ac.in>

Fwd: Approval of result for Semester II, 2017-2018 for M. Tech and M. Des. batch 2017

1 message

santosh santosh <santosh@iiitdmj.ac.in> Mon, Jun 4, 2018 at 10:54 PM
To: richard <richard@iiitdmj.ac.in>, praveen praveen <praveen@iiitdmj.ac.in>
Cc: "dean.acad dean.acad" <dean.acad@iiitdmj.ac.in>, rizwan rizwan <rizwan@iiitdmj.ac.in>

---------- Forwarded message ---------
From: Sanjeev Deshmukh <director.jbp@gmail.com>
Date: Mon, Jun 4, 2018, 7:16 PM
Subject: Re: Approval of result for Semester II, 2017-2018 for M. Tech and M. Des. batch 2017
To: santosh santosh <santosh@iiitdmj.ac.in>

Approved as proposed by Dean(acad)
SGD

On 4 June 2018 at 15:37, santosh santosh <santosh@iiitdmj.ac.in> wrote:

Respected Sir,

Please find attached request for **approval of result** for Semester II, 2017-2018 for M.Tech and M.Des. batch 2017.

Result sheet prepared for M. Tech and M. Des. batch 2017 CSE-ECE-ME-Mechatronics - Design discipline is attached.

Same is checked and recommended by Dean Academic for approval please.

Put up for perusal and orders please.

धन्यवाद,

संतोष महोबिया/Santosh Mahobia
For D R Dir

---------- Forwarded message ----------
From: **praveen praveen** <praveen@iiitdmj.ac.in>
Date: Mon, Jun 4, 2018 at 3:35 PM
Subject: Approval of result for Semester II, 2017-2018 for M. Tech and M. Des. batch 2017
To: santosh santosh <santosh@iiitdmj.ac.in>

Respected Sir,

Please find attached request for **approval of result** for Semester II, 2017-2018 for M.Tech and M.Des. batch 2017.

Result sheet prepared for M. Tech and M. Des. batch 2017 CSE-ECE-ME-Mechatronics - Design discipline is attached.

Same is checked and recommended by Dean Academic for approval please.

Put up for perusal and orders please.

3710/6/18

062

PDPM
Indian Institute of Information Technology,
Design and Manufacturing Jabalpur

Rizwan Ahmed
Assistant Registrar (Academic)

IIITDMJ/AR (Acad.)/2018/05/273
May 31, 2018

To,
The Chairperson Senate
~~PDPM IIITDM Jabalpur~~

Through: Dean Academic

Sub: Reg. Approval of results (Semester II, 2017-18) for M.Tech. and M.Des. batch 2017 .

Dear Sir,

Kindly find enclosed herewith results for Semester II, 2017-18 of M.Tech. and M.Des. batch 2017 in following discipline:

1. Computer Science & Engineering
2. Electronics and Communication Engineering
3. Mechanical Engineering
4. Mechatronics
5. Design

You are requested to kindly approve the attached results of above batch 2017.

Recommended for approval
31/5/18

Dean Academic

(Rizwan Ahmed)
Assistant Registrar (Academic)

Chairperson Senate

निदेशक महोदय द्वारा ई-मेल से
स्वीकृति प्राप्त, प्रतिलिपि संलग्न है।

2710
5/6/18

richard richard <richard@iiitdmj.ac.in>

Fwd: Approval of result for Semester II, 2017-2018 for Ph.D. under Dual Degree.

1 message

santosh santosh <santosh@iiitdmj.ac.in> Wed, Jun 13, 2018 at 7:40 AM
To: richard <richard@iiitdmj.ac.in>, praveen praveen <praveen@iiitdmj.ac.in>
Cc: rizwan rizwan <rizwan@iiitdmj.ac.in>

---------- Forwarded message ---------
From: Sanjeev Deshmukh <director.jbp@gmail.com>
Date: Wed, Jun 13, 2018, 7:31 AM
Subject: Re: Approval of result for Semester II, 2017-2018 for Ph.D. under Dual Degree.
To: santosh santosh <santosh@iiitdmj.ac.in>

Approved
SGD

On 12 June 2018 at 16:57, santosh santosh <santosh@iiitdmj.ac.in> wrote:

> Respected Sir,
>
> Please find attached request for **approval of result** for Semester II, 2017-2018 for **Ph.D. under Dual Degree.**
>
> Result sheet prepared for Ph.D. under Dual Degree.
>
> Same is checked and recommended by Dean Academic for approval please.
>
> Put up for perusal and orders please.
>
> धन्यवाद,
>
> संतोष महोबिया/Santosh Mahobia
> For D R Dir
>
> ---------- Forwarded message ---------
> From: **praveen praveen** <praveen@iiitdmj.ac.in>
> Date: Tue, Jun 12, 2018 at 3:41 PM
> Subject: Approval of result for Semester II, 2017-2018 for Ph.D. under Dual Degree.
> To: santosh santosh <santosh@iiitdmj.ac.in>
>
> Respected Sir,
>
> Please find attached request for **approval of result** for Semester II, 2017-2018 for Ph.D. under Dual Degree.
>
> Result sheet prepared for Ph.D. under Dual Degree.
>
> Same is checked and recommended by Dean Academic for approval please.
>
> Put up for perusal and orders please.
>
> Regards,

063

PDPM
Indian Institute of Information Technology,
Design and Manufacturing Jabalpur

Rizwan Ahmed
Assistant Registrar (Academic)

IIITDMJ/AR (Acad.)/2018/06/310
June 12, 2018

To,
The Chairperson Senate
PDPM IIITDM Jabalpur

Through: Dean Academic

Sub: Reg. Approval of results (Semester II, 2017-18) for Ph.D. under Dual Degree.

Dear Sir,

Kindly find enclosed herewith results for Semester II, 2017-18 of Ph.D. under Dual Degree in the following discipline:

1. Computer Science & Engineering
2. Electronics and Communication Engineering
3. Mechanical Engineering

You are requested to kindly approve the attached results for the students under Dual Degree.

12/6/18
(Rizwan Ahmed)
Assistant Registrar (Academic)

12/6/18
Dean Academic

Chairperson Senate

निदेशक महोदय द्वारा ई-मेल से
स्वीकृति प्राप्त, प्रतिलिपि संलग्न है।

richard richard <richard@iiitdmj.ac.in>

Fwd: Regarding academic performance evaluation report of UG Semester - II, 2017-18.

1 message

santosh santosh <santosh@iiitdmj.ac.in> Tue, Jun 26, 2018 at 1:58 PM
To: richard <richard@iiitdmj.ac.in>, praveen praveen <praveen@iiitdmj.ac.in>
Cc: rizwan rizwan <rizwan@iiitdmj.ac.in>, simanta simanta <simanta@iiitdmj.ac.in>, "dean.acad dean.acad" <dean.acad@iiitdmj.ac.in>

धन्यवाद,

संतोष महोबिया/Santosh Mahobia
सहायक कुलसचिव/Assistant Registrar
सामान्य प्रशासन, आं.अंकेक्षण,राजभाषा,जनसूचना अधिकारी / (G.A., I.A., O.L. & CPIO)
PDPM-IIITDM जबलपुर (म.प्र.)
0761-2794063

---------- Forwarded message ----------
From: **Sanjeev Deshmukh** <director.jbp@gmail.com>
Date: Tue, Jun 26, 2018 at 1:56 PM
Subject: Re: Regarding academic performance evaluation report of UG Semester - II, 2017-18.
To: santosh santosh <santosh@iiitdmj.ac.in>

Approved as proposed
SGD

On 26 June 2018 at 11:16, santosh santosh <santosh@iiitdmj.ac.in> wrote:

> Respected Sir,
>
> Please find attached letter from AR(Academic) regarding academic performance evaluation report (APER) of UG Semester - II, 2017-18.
>
> Same is recommended by Dean Academic for approval please.
>
> Put up for perusal and orders please.
>
> Regards,
>
> संतोष महोबिया/Santosh Mahobia
> For D R Dir.
>
> ---------- Forwarded message ----------
> From: **praveen praveen** <praveen@iiitdmj.ac.in>
> Date: Mon, Jun 25, 2018 at 5:54 PM
> Subject: Regarding academic performance evaluation report of UG Semester - II, 2017-18.
> To: santosh santosh <santosh@iiitdmj.ac.in>
>
> Respected Sir,
>
> Please find attached letter from AR(Academic) regarding academic performance evaluation report of UG Semester - II, 2017-18.

3759 26/6/18

064

पं. द्वारका प्रसाद मिश्र
भारतीय सूचना प्रौद्योगिकी,
अभिकल्पन एवं विनिर्माण संस्थान जबलपुर
(संसदीय अधिनियम द्वारा स्थापित राष्ट्रीय महत्व का संस्थान)

Pt. Dwarka Prasad Mishra
Indian Institute of Information Technology,
Design & Manufacturing, Jabalpur
(An Institute of National Importance established by an Act of Parliament)

Rizwan Ahmed
Assistant Registrar (Academic)

IIITDMJ/AR(Acad.)/2018/06/ 536
June 25, 2018

To,
The Chairperson Senate
PDPM-IIITDM Jablapur

Through: Dean Academic

Recommended for approval
25/6/18

Sub: Academic Performance Evaluation Report of UG Semester – II, 2017-18.

Dear Sir,

Academic Performance Evaluation Report (APEC) of UG students of Batch 2017, 2016, 2015, 2014 & 2013. Upto Semester II, 2017-18 is put up for approval and perusal, please.

25/6/18

(Rizwan Ahmed)

निदेशक महोदय द्वारा ई-मेल से
स्वीकृति प्राप्त, प्रतिलिपि संलग्न है।

डुमना विमानतल मार्ग
जबलपुर - 482005 म.प्र. भारत
दूरभाष: +91-761-2794065, फैक्स: +91-761-2794094
वेबसाइट: www.iiitdmj.ac.in

Dumna Airport Road
Jabalpur – 482005, M.P. India
Phone: +91-761-2794065, Fax: -+91-761-2794094
URL: www.iiitdmj.ac.in

richard richard <richard@iiitdmj.ac.in>

Fwd: Regarding academic performance evaluation report upto semester II, 2017-18.

registrar registrar <registrar@iiitdmj.ac.in> Wed, Jul 4, 2018 at 9:44 AM
To: richard richard <richard@iiitdmj.ac.in>, praveen praveen <praveen@iiitdmj.ac.in>

---------- Forwarded message ----------
From: Sanjeev Deshmukh <director.jbp@gmail.com>
Date: Wed, Jul 4, 2018 at 9:44 AM
Subject: Re: Regarding academic performance evaluation report upto semester II, 2017-18.
To: registrar registrar <registrar@iiitdmj.ac.in>

Approved as proposed
SGD

On 4 July 2018 at 09:27, registrar registrar <registrar@iiitdmj.ac.in> wrote:

Respected Sir,

Please find attached letter from AR (Academic) regarding academic performance evaluation report upto semester II, 2017-18.

Same is forwarded by Dean Academic for approval please.

Put up for perusal and orders please.

Regards,

--
(Swapnali D Gadekar)
Acting Registrar & Secretary (BOG)
PDPM IIITDM Jabalpur

--
(Swapnali D Gadekar)
Acting Registrar & Secretary (BOG)
PDPM IIITDM Jabalpur

PDPM
Indian Institute of Information Technology,
Design & Manufacturing Jabalpur

Rizwan Ahmed
Assistant Registrar (Academic)

IIITDMJ/Dean (Acad.)/2018/07/434
July 02, 2018

To,
The Chairperson Senate
PDPM IIITDM Jabalpur

Recommended & approved
27/7/18

निदेशक महोदय द्वारा ई-मेल से
स्वीकृति प्राप्त, प्रतिलिपि संलग्न है।

Through: Dean Academic

Sub: Academic Performance Evaluation Report upto Semester II, 2017-18.

Dear Sir,

Academic Performance Evaluation Report (APEC) of Ph.D., M.Tech. and M.Des students of the Institute upto Semester II, 2017-18 is put up for approval and perusal, please.

27/7/18
(Rizwan Ahmed)

Encl: APEC for Batches of PhD/M.Tech. and M.Des. programme

3807
31/7/18

richard richard <richard@iiitdmj.ac.in>

Fwd: Results/Grade of B. Tech 2013, 2014, 2015, 2016 & 2017 (B.Tech/B. Des) Batch students for 2017 -2018, Summer Semester

praveen praveen <praveen@iiitdmj.ac.in> Tue, Aug 7, 2018 at 12:38 PM
To: richard richard <richard@iiitdmj.ac.in>

---------- Forwarded message ----------
From: **rizwan rizwan** <rizwan@iiitdmj.ac.in>
Date: Tue, Aug 7, 2018 at 10:32 AM
Subject: Fwd: Results/Grade of B. Tech 2013, 2014, 2015, 2016 & 2017 (B.Tech/B. Des) Batch students for 2017 -2018, Summer Semester
To: praveen praveen <praveen@iiitdmj.ac.in>

---------- Forwarded message ----------
From: **Sanjeev Deshmukh** <director.jbp@gmail.com>
Date: Mon, Aug 6, 2018 at 7:28 PM
Subject: Re: Results/Grade of B. Tech 2013, 2014, 2015, 2016 & 2017 (B.Tech/B. Des) Batch students for 2017 -2018, Summer Semester
To: rizwan rizwan <rizwan@iiitdmj.ac.in>, registrar registrar <registrar@iiitdmj.ac.in>
Cc: praveen praveen <praveen@iiitdmj.ac.in>

Approved as proposed
SGD

On 6 August 2018 at 15:52, rizwan rizwan <rizwan@iiitdmj.ac.in> wrote:

> Respected Sir,
>
> Please find attached Results/Grade of B. Tech 2013, 2014, 2015, 2016 & 2017 (B.Tech/B. Des) batch students for 2017 -2018, summer Semester.
>
> Same is recommended by Dean Academic for approval please.
>
> Put up for perusal and orders please.
>
> Kind Regards
> Rizwan Ahmed
> For DR(Directorate)

4055
9/8/18

066

पं. द्वारका प्रसाद मिश्र
भारतीय सूचना प्रौद्योगिकी,
अभिकल्प एवं विनिर्माण संस्थान जबलपुर
(संसदीय अधिनियम द्वारा स्थापित राष्ट्रीय महत्व का संस्थान)

Pt. Dwarka Prasad Mishra
Indian Institute of Information Technology,
Design & Manufacturing, Jabalpur
(An Institute of National Importance established by an Act of Parliament)

Rizwan Ahmed
Assistant Registrar (Academic)

IIITDMJ/AR(Acad.)/2018/08-626
August 6, 2018

To,
The Chairperson
Academic Senate
PDPM-IIITDM, Jabalpur

Through: Dean Academic

Recommended for approval
6/8/18

निदेशक महोदय द्वारा ई-मेल से स्वीकृति प्राप्त, प्रतिलिपि संलग्न है।

Subject: Approval for Summer Grades of B.Tech 2013, 2014, 2015, 2016 & 2017 (B.Tech/ B.Des) Batch students for 2017-18, Summer Semester.

Dear Sir,

Enclosed Please find the Result/Grades of B.Tech 2013, 2014, 2015, 2016 & 2017 (B.Tech/ B.Des) Batch students for 2017-18, Summer Semester.

Kindly approve the same.

6/8/18
(Rizwan Ahmed)

4055
7/8/18

richard richard <richard@iiitdmj.ac.in>

Fwd: Results/Grade of B. Tech 2016 & 2017 B. Tech) batch students for 2017 -2018, Special Semester.

swapnali swapnali <swapnali@iiitdmj.ac.in> Wed, Sep 5, 2018 at 2:27 PM
To: praveen praveen <praveen@iiitdmj.ac.in>, richard richard <richard@iiitdmj.ac.in>

Swapnali Gadekar
Acting Registrar/ Deputy Registrar (F & A/P &S/Dir)
PDPM Indian Institute of Information Technology,
Design and Manufacturing Jabalpur (MP)-482005

---------- Forwarded message ----------
From: **Sanjeev Deshmukh** <director.jbp@gmail.com>
Date: Wed, Sep 5, 2018 at 2:06 PM
Subject: Re: Results/Grade of B. Tech 2016 & 2017 B. Tech) batch students for 2017 -2018, Special Semester.
To: swapnali swapnali <swapnali@iiitdmj.ac.in>

Approved as proposed
SGD

On Wed, 5 Sep 2018 at 12:49, swapnali swapnali <swapnali@iiitdmj.ac.in> wrote:

Respected Sir,

Please find attached Results/Grade of B. Tech 2016 & 2017 B. Tech batch students for 2017 -2018, Special Semester.

Same is recommended by Dean Academic for approval please.

Put up for perusal and orders please.

Kind Regards

Swapnali Gadekar
Acting Registrar/ Deputy Registrar (F & A/P &S/Dir)
PDPM Indian Institute of Information Technology,
Design and Manufacturing Jabalpur (MP)-482005

4225/5918

पं द्वारका प्रसाद मिश्र
भारतीय सूचना प्रौद्योगिकी,
अभिकल्पन एवं विनिर्माण संस्थान जबलपुर
(संसद के अधिनियम द्वारा स्थापित राष्ट्रीय महत्व का संस्थान)

Pt. Dwarka Prasad Mishra
Indian Institute of Information Technology,
Design & Manufacturing, Jabalpur
(An Institute of National Importance established by an Act of Parliament)

Rizwan Ahmed
Assistant Registrar (Academic)

IIITDMJ/AR(Acad.)/2018/08-736
August 30, 2018

To.
The Chairperson
Academic Senate
PDPM-IIITDM, Jabalpur

Through: Dean Academic

Received for approval
Kodg
31/8/18

Subject: Approval for Result/ Grades of B.Tech 2016 & 2017 B.Tech Batch students for 2017-18, Special Semester.

Dear Sir,

Enclosed Please find the Result/Grades of B.Tech 2016 & 2017 B.Tech Batch students for 2017-18, Special Semester.

Kindly approve the same.

30/8/18

(Rizwan Ahmed)

richard richard <richard@iiitdmj.ac.in>

Fwd: Re: Proposal for modification in a course ME205 _Dr. M Z Ansari

1 message

santosh santosh <santosh@iiitdmj.ac.in> Wed, Jan 31, 2018 at 7:50 PM
To: shailesh <shailesh@iiitdmj.ac.in>, richard <richard@iiitdmj.ac.in>

श्री शैलेश/रिचर्ड ,

आवश्यक कार्यवाही हेतु प्राप्त ईमेल अग्रेषित किया जा रहा है।

धन्यवाद,

---------- Forwarded message ----------
From: "Sanjeev Deshmukh" <director.jbp@gmail.com>
Date: Jan 31, 2018 6:29 PM
Subject: Re: Proposal for modification in a course ME205 _Dr. M Z Ansari
To: "santosh santosh" <santosh@iiitdmj.ac.in>
Cc:

Approved
SGD

On Wed, 31 Jan 2018 at 13:08, santosh santosh <santosh@iiitdmj.ac.in> wrote:

आदरणीय सर,

Proposal submitted by Dr. M Z Ansari for modification in a course **ME205** is recommended by APCS committee and Dean Academic.

Same is being put up for kind perusal & orders,please

सादर,

संतोष महोबिया/Santosh Mahobia
सहायक कुलसचिव/Assistant Registrar
निदेशालय/Directorate

2/1 (2nd)
1/2/18

Senate

2.670
1/2/18

068

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for a ~~new course~~/Modification in a course

I. Course Title: **Engineering Materials**

II. Proposed Course Number: ~~ME205~~

III. Units: 28 Lecture 2 Tutorial 0 Lab 0 Credit 02

IV. Mode: core/Elective/EMF:

V. Evaluation Scheme: **Quiz I (10%), Midterm (30%), Quiz II (10%), End term (50%)**

VI. Semester: **IV**

VII. Programme: **BTech**

VIII. Learning Objective: **Teach students about materials used in engineering applications**

IX. Detailed Course Content:

Engineering Materials and Their Properties; The Price and Availability of Materials; The Elastic Moduli; The Physical Basis of Young's Modulus; Yield Strength, Tensile Strength, and Ductility; Strengthening Methods and Plasticity of Polycrystals **[05H]**
Fast Fracture and Toughness; Fatigue Failure; Creep. **[04H]**
Metals; Time–Temperature–Transformation Diagram; Fine-Grained Castings; Single Crystals for Semiconductors; Amorphous Metals; Light Alloys; Processing Metals; Heat Treatment **[07H]**
Ceramics; Ceramic Composites; Mechanical Properties of Ceramics; Production of Engineering Ceramics; Applications**[04H]**
Polymers; Mechanical Properties of Polymers; Processing Polymers; Applications **[05H]**
Composites; Properties of Composites and Foams; Processing of composites; Basic Mechanics of Composites; Applications **[03H]**
Text/Reference books: **1.** DRH Jones and M Ashby, Engineering Materials 1 4th Ed., Butterworth-Heinemann **2.** DRH Jones and M Ashby, Engineering Materials 2 4th Ed., Butterworth-Heinemann **3.** NE Dowling, Mechanical Behavior of Materials: Engineering Methods for Deformation, Fracture, and Fatigue, 3rd Ed., Pearson **4.** Callister, Materials Science and Engineering, 8th Ed., John Wiley & Sons Inc.

The syllabus need modifications because: **(1)** Most of the students have not done a prior course in Material Science and lots of time is spend in explaining Material Science than Engg. Materials; and **(2)** It was originally designed for VIth or higher semester of UG ME, it is now realized that IVth year students have insufficient background to comprehend the contents, and therefore a modification in contents is suggested.

M. Zahid 22/01/2018

Name and Signature of the proposer (s): **Dr. M.Z. Ansari**

069

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: e 3
2. The course may also be offered to: U G
3. Portion of contents repeated: About 15% with NS205h
4. Course is assigned ME205 number
5. Any other point:
   As per the comments mentioned at "A", revised contents may please be approved.

23/01/2018

(Head, MED)

Recommendation of the APCS

Recommended/~~Not recommended~~

(Member1) (Member2) (Member3) 23/1 (Member4) 22/1/18 (Member5) 24/01/18 (Convener) 30.1.18

Modification of course is recommended for appvl.

30/1/18

Dean Academic

Approved/ Not Approved

निदेशक महोदय द्वारा ई-मेल से स्वीकृति प्राप्त, प्रतिलिपि संलग्न है।

Chairperson Senate

185R 30/01/18

MED 1516 23/1/18

12/2/18

richard richard <richard@iiitdmj.ac.in>

Fwd: Re: Fwd: Re: Proposal of New Courses_Submitted by Dr Dheeraj Sharma_Dr Kusum Bharti_Dr V K Jain

1 message

santosh santosh <santosh@iiitdmj.ac.in> Wed, Jan 24, 2018 at 2:35 PM
To: shailesh <shailesh@iiitdmj.ac.in>
Cc: richard <richard@iiitdmj.ac.in>

श्री शैलेश,

आवश्यक कार्यवाही हेतु प्राप्त ईमेल अग्रेषित किया जा रहा है।

धन्यवाद,

संतोष महोबिया/Santosh Mahobia
सहायक कुलसचिव/Assistant Registrar
निदेशालय/Directorate

---------- Forwarded message ----------
From: Sanjeev Deshmukh <director.jbp@gmail.com>
Date: Wed, Jan 24, 2018 at 2:14 PM
Subject: Re: Re: Fwd: Re: Proposal of New Courses_Submitted by Dr Dheeraj Sharma_Dr Kusum Bharti_Dr V K Jain
To: santosh santosh <santosh@iiitdmj.ac.in>

Approved
SGD

On 23 January 2018 at 20:08, santosh santosh <santosh@iiitdmj.ac.in> wrote:

आदरणीय सर,

Reply of Dean Academic is being forwarded for perusal, please

Regards,
S.Mahobia
---------- Forwarded message ----------
From: "prabin16 prabin16" <prabin16@iiitdmj.ac.in>
Date: Jan 23, 2018 8:05 PM
Subject: Re: Fwd: Re: Proposal of New Courses_Submitted by Dr Dheeraj Sharma_Dr Kusum Bharti_Dr V K Jain
To: "santosh santosh" <santosh@iiitdmj.ac.in>
Cc:

Dear Sir
These are the courses offered by Japanese professors and will run this semester. They sent the course names before. But they sent the syllabus recently.
Regards
Prabin

On Jan 23, 2018 7:41 PM, "santosh santosh" <santosh@iiitdmj.ac.in> wrote:

---------- Forwarded message ----------
From: "Sanjeev Deshmukh" <director.jbp@gmail.com>
Date: Jan 23, 2018 7:04 PM
Subject: Re: Proposal of New Courses_Submitted by Dr Dheeraj Sharma_Dr Kusum Bharti_Dr V K Jain
To: "santosh santosh" <santosh@iiitdmj.ac.in>, <dean.acad@iiitdmj.ac.in>

070

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for a new course/Modification in a course

I. Course Title: VLSI Design

II. Proposed Course Number: ~~EM 603~~ EM 641

III. Units: Lecture 10 Tutorial : Nil Lab : Nil Credit : 1

IV. Mode: EMF

V. Evaluation Scheme: Quiz (30%), End Term (70%) (Tentative)

VI. Semester: UG/PG, I/ II

VII. Programme: BTech/MTech/PhD

VIII. Learning Objective: Students will get familiarized with VLSI architecture design, strategies and optimization

IX. Detailed Course Content:

1. Introduction to the lectures and fundamentals of CMOS circuits 2. Combinational circuits, sequential circuits, finite state machines, and VLSI design flow 3. Automatic logic and high-level synthesis techniques 4. Simulation and emulation techniques 5. Formal analysis of logic circuits with Binary Decision Diagram (BDD) and Satisfiability checking 6. Timing and power analysis of logic circuits and their optimizations 7. FPGA design for prototyping and super computing 8. Development of High Performance and Flexible Computing Systems with Electronic Design Automation 9. Optimization of pipe line architecture 10. Reliability and fault analysis of VLSI systems	10 H

Text/Reference books:

1. CMOS Digital Integrated Circuits: Analysis and Design, S. M. Kang and Y. Leblebici 3 rd Edition 2002, MH.
2. Modern VLSI Design: System on Chip, W. Wolf, 3 rd Edition2002 , PH/Pearson.
3. Principles of CMOS VLSI Design: A Systems Perspective,N. Weste, K. Eshraghian and M. J. S. Smith, Second Edition (Expanded), AW/Pearson, 2001.
4. Verification Techniques for System-Level Design, Masahiro Fujita, Indradeep Ghosh and Mukul Prasad eBook ISBN: 9780080553139, Hardcover ISBN: 9780123706164, Morgan Kaufmann, October 2007.
5. VHDL design representation & synthesis, Z. Navabi, McGraw, 2nd Edition 1993 Hill International.
6. Verilog HDL: A Guide to Digital Design and Synthesis, S. Palnitkar, 2nd Edition 2003 Prentice Hall NJ, USA

18/6/19/1/19

10-01-2018

071

16-01-2018

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: ECE/CSE Disciplines/Programmes
3. Portion of contents repeated:
4. Course is assigned As assigned number EM641
5. Any other point:

10.01.2018

(Head, ECE Discipline)

Recommendation of the APCS

Recommended/Not recommended

(Member1) (Member2) (Member3) (Member4) (Member5) (Convener) 18/1/18

Recommended

18/1/18

Dean Academic

Approved/ Not Approved

निदेशक महोदय द्वारा ई-मेल से स्वीकृति प्राप्त, प्रतिलिपि संलग्न है।

Chairperson Senate

22/1/18

Dean (Academic)

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for a new course

I. Course Title: Advances in kernel methods

II. Proposed Course Number: EM602f

III. Units: Lecture 10 Tutorial 00 Lab 00 Credit 01

IV. Mode: core/Elective/EMF: EMF

V. Evaluation Scheme: Quiz 1 10%, End Term 90% (tentative)

VI. Semester: I/II

VII. Programme: PG open to UG

VIII. Learning Objective: Student will learn about new trends of kernel methods: statistical inference with positive definite kernels.

IX. Detailed Course Content:

Module 1: Introduction, Mathematical foundations of kernel methods, Statistical inference with kernel means, Dependence analysis with kernels, Bayesian inference with kernels, Recent advances with kernels	10 H

Reference books:

1. Bernhard Schoelkopf and Alexander J. Smola. Learning with Kernels. (2001) MIT Press.
2. Krikamol Muandet, Kenji Fukumizu, Bharath Sriperumbudur and Bernhard Schölkopf (2017), "Kernel Mean Embedding of Distributions: A Review and Beyond", Foundations and Trends in Machine Learning: Vol. 10: No. 1-2, pp 1-141. http://dx.doi.org/10.1561/2200000060

for Prof. Kenji Fukumizu

Bharath

Signature of the proposer (s):

305
10/1/18

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for a new course/Modification in a course

I. Course Title: Middleware Approaches for Distributed Systems

II. Proposed Course Number: EM604e

III. Units: 01 Lecture: 03 Tutorial: Nil Lab: Nil Credit : 01

IV. Mode: core/Elective/EMF: EMF

V. Evaluation Scheme: Quiz (20%) Exam (80%)

VI. Semester: Even/Odd.

VII. Programme: BTech/MTech

VIII. Learning Objective: This course studies the key design principles of distributed systems, and middleware-level solutions to fundamental problems in distributed systems. The goals of this course are to understand how real distributed systems are built and worked.

IX. Detailed Course Content:

Module1: communication protocols, processes and threads, distributed algorithms (e.g., synchronization, consistency, and replication), middleware systems for distributed systems.	10 H

Text/Reference books:

1. A.S. Tanenbaum and M. van Steen, Distributed Systems: Principles and Paradigms, Pearson/Prentice-Hall, 2007 (2nd Edition).
2. G. Coulouris, J. Dollimore, and T. Kindberg, Distributed Systems: Concepts and Design, 5th edition, Addison-Wesley, 2012.

for Prof. Ichiro Satoh

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: CSE/ECE Disciplines/Programmes
3. Portion of contents repeated: NIL
4. Course is assigned EM604e number
5. Any other point:

Head

11/1/18

(Head, CSE Discipline)

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Recommendation of the APCS

Recommended/Not recommended

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

@ Please confirm that number of lectures are recommended

Dean Academic

Approved/ Not Approved

Chairperson Senate

Proposal for a new course/Modification in a course

I. Course Title: Number Theory and Cryptography
II. Proposed Course Number: EC 307a
III. Units: Lecture 3 Tutorial 0 Lab 0 Credit 4
IV. Mode: core/Elective/EMF: Elective
V. Evaluation Scheme: Scheme-I
VI. Semester:
VII. Programme: BTech
VIII. Learning Objective: This course provides fundamental concepts of number theory and its application in cryptography.
IX. Detailed Course Content:

Module1: Well ordering property, divisibility of integers, GCD computations and Integer factorization, modular arithmetic, linear congruence, Chinese remainder theorem.	10 H
Module2:Fermat and Euler Theorem, Primality Testing, Group theory, Finite Fields, Quadratic Residues Primitive Roots, Discrete logarithmic.	10 H
Module3: ~~Module 3:~~ Stream ciphers, Block ciphers: DES and AES, Block cipher modes, Hash Functions, Message Authentication Codes.	10 H
Module4: ~~Module 4:~~ Public key cryptography: RSA and ElGamal, Diffie Hellman Key Exchange, digital signatures, digital certificates, Elliptic curve cryptography, Key-exchange protocols	10 H

Text/Reference books:

1. A. Menezes, P. van Oorschot, S. Vanstone, Handbook of Applied Cryptography, CRC Press, 1997
2. W. Stallings, Cryptography and Network Security: Principles and Practice, Fifth Edition, Prentice Hall, 2011
3. David M. Burton, Elementary Number Theory, Seventh Edition, McGraw Hill, 2012
4. Elementary Number Theory and Its Application, 6th Edition, Kenneth H. Rosen, Addison-Wesley, 2011

Signature of the proposer (s): Dr. Sraban Kumar Mohanty and Dr. Mohona Ghosh

Approved

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: ECE, ME Disciplines/Programmes
3. Portion of contents repeated: 10/15% with Cryptography and Network Security and Elementary Number Theory
4. Course is assigned ES3079 number
5. Any other point:

The course will be offered in the open elective slot.

28/12/17

(Head, CSE Discipline)

Recommendation of the APCS

Recommended/Not recommended

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

3/1/18

Dean Academic

Approved/ Not Approved

Chairperson Senate

Proposal for a new course/Modification in a course

I. Course Title: Fundamentals of Deep Learning

II. Proposed Course Number: IM 6..1.

III. Units: Lecture 2* Tutorial 0 Lab 0 Credit 2 (*twenty lectures)

IV. Mode: core/Elective/EMF: EMF

V. Evaluation Scheme: Quiz-20%, Midesem-30%, Endsem-50%

VI. Semester: II

VII. Programme: MTech/PhD open to UG

VIII. Learning Objective: After reading this course the student should be able to understand the unique features of deep neural networks, implement them on an open source programming platform, tune the network for cost optimization, and apply the CNN \RNN for specific applications.

IX. Detailed Course Content:

Module1: Introduction to supervised learning, neural networks and deep learning, Logistic regression, gradient descent, vectorization, logistic regression cost function, python programming of logistic regression gradient descent and cost function. Activation functions, Forward and Backward propagation, parameters and hyperparameters, Improving deep neural networks, hyperparameters tuning.	6H
Module2: Regularization and optimization, Bias and variance, Dropout regularization, Normalizing input, Weight initialization, Gradient checking. Optimization, Mini batch gradient descent, Exponentially weighted average, Adam optimization.	4 H
Module3: Brief introduction to Tensor flow and implementation of algorithms. Convolution neural network (CNN), ResNets, Applications of CNN to computer vision and object detection.	6 H
Module4: Recurrent Neural Networks (RNNs), Forward Propagation and Backward propagation in RNNs, Implementation of an RNN, GRUs and LSTMs, Vanishing and Exploding Gradient Problem.	4 H

Text/Reference books:

1. I. Goodfellow, Y. Bengio, and A. Courville, *Deep Learning*, MIT Press, 2016.
2. J.Patterson and A. Gibson, *Deep Learning: A Practitioner's Approach*, O'Reilly Media, 2017.
3. N. Baduma, and N. Locascio, *Fundamentals of Deep Learning: Designing Next-Generation Machine Intelligence Algorithms*, O'Reilly Media, 2017.

21-12-2017

Signature of the proposer (s):

21/12/17

4.1.18

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/ME Disciplines/Programmes
3. Portion of contents repeated: 15% with CS 617
4. Course is assigned EM 667 number
5. Any other point:

Pinki 21/12/17

(Head, CSE Discipline)

Recommendation of the APCS

Recommended/Not recommended

M. Zahid 21/12/17 (Member1) (Member2) (Member3) (Member4) (Member5) (Convener)

Dean Academic 3/1/18

Approved/ Not Approved

4.1.18

Chairperson Senate

Proposal for a new course/Modification in a course

I. Course Title: **Sensing Methods and Devices**
II. Proposed Course Number: **ES 306 b**
III. Units: Lecture 3 Tutorial 0 Lab 0 Credit 04
IV. Mode: **Elective**
V. Evaluation Scheme: Quiz I (15%), Mid-Term (30%), Quiz II (15%), End-Term (40%)
VI. Semester: **VI**
VII. Programme: **B.Tech**
VIII. Learning Objective: The objective of this course is to learn the basic working principle and operation of various sensors and sensor based devices. This course introduces the various types of sensors, technology, and their applications. Additionally, the course also introduces the methods of interfacing sensors to electronic systems.
IX. Detailed Course Content:

Module1: *Review of Measurements*: Principles of measurements; Dynamic and Static characteristics; Measurement devices; Primary measuring element selection and characteristics; Signal transmission: Types of signal, Standard signal ranges; *Transducers*: Classification; Resistance, Inductance and Capacitance Types; Vibration and Piezo-electric transducers;	10 H
Module2: *Principles of Sensing*: Data Acquisition; Sensor Classification; Transfer Function; Calibration; Sensor Characteristics; *Physical Principles of Sensing*: Electric Charges, Fields, and Potentials; Capacitance; Magnetism; Induction; Resistance; Piezoelectric Effect; Hall Effect; Thermoelectric Effects; Sound Waves; Heat Transfer.	10 H
Module3: *Electronic Circuits Interface*: Signal Conditioners; Sensor Connections; Excitation Circuits; Analog-to-Digital Converters; Integrated Interfaces; Data Transmission; Noise in Sensors and Circuits; Batteries for Low-Power Sensors; Energy Harvesting.	10 H
Module4: Thermal Sensors: Mechanical Sensors; Optical Sensors; Chemical and Biomedical Sensors; Microwave sensors and imaging systems. *Arduino Microcontroller Interface*: Features of Arduino Microcontroller, Architecture of Arduino, Different boards of Arduino, Arduino Interfacing and Applications, Anatomy of an Interactive Device like Sensors and Actuators, Features of ARM processor, and ARM Architecture.	10 H

Text/Reference books:

1. Jacob Fraden, "Handbook of Modern Sensors: Physics, Designs, and Applications", 5th ed., Springer, 2015.
2. Doebelin, "Measurement systems: Applications and Design", 5th ed., McGraw Hill, 2004.
3. Ian R. Sinclair, "Sensors and Transducers", Elsevier, 2001.

A separate course entitled as 'Sensors and Actuators (MT503)' is offered by Mechatronics specialization for post-graduate students. However, the proposed course is for under-graduate students and there is no more than 30% similarity in between two courses.

Signature of the proposer (s):

Dr. Atul Kumar
Assistant Professor
Department of ECE,
PDPM - IIITDM Jabalpur.

19/12/2017

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: E C E Disciplines/Programmes
3. Portion of contents repeated: Less than 30%.
4. Course is assigned E C 306 b number
5. Any other point: Sensing Methods & Devices.

for [signature] 19.12.17

(Head, E C E Discipline)

Recommendation of the APCS

Recommended/Not recommended

29/12/17 (Member1) | 29/12/17 (Member2) | (Member3) | 3/1/18 (Member4) | 3.1.18 (Member5) | 3/1/18 (Convener)

3/1/18
Dean Academic

✓
Approved/ Not Approved

5-4.1.18
Chairperson Senate

PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN & MANUFACTURING JABALPUR

Proposal for Modification in a course

I. Course Title: Professional Lab III

II. Proposed Course Number: CS3031.

III. Units: Lecture 0 Tutorial 0 Lab 3 Credit 2

IV. Mode: core/Elective/EMF: Core

V. Evaluation Scheme: Lab Performance (60%), End Sem Exam (40%)

VI. Semester: VI (OLD Scheme)

VII. Programme: B. Tech(2015 Batch)

VIII. Learning Objective: To Learn different stages of Software development, testing, maintenance and quality assessment

IX. Detailed Course Content:

Module1: Python Programming, Open source Python frameworks like Django & ERPNext	10 H
Module2: Programming using HTML, CSS, JavaScript, JQuery and open source UI frameworks like Semantic UI	10 H
Module3: Software Analysis tools (e.g., debuggers, profilers, automated bug-finders, style-checkers), Construction tools (e.g., compilation managers and build scripts)	10 H
Module4: Collaboration tools (e.g., version control systems e.g. GitHub and problem report databases), Design tools (e.g. UML-based modeling tools like StarUML)	10 H
Text/Reference books: 1. HTML 5 Black Book, Covers CSS 3, JavaScript, XML, XHTML, AJAX, PHP and jQuery, 2ed by DT Editorial, Dreamtech Publication, 2016 2. HTML and CSS: Design and Build Websites by Jon Duckett, Jon Wiley & Sons, 2014 3. JavaScript and JQuery: Interactive Front-End Web Development by Jon Duckett, Jon Wiley & Sons, 2014 4. HTML & CSS: The Complete Reference, Fifth Edition, by Thomas Powell, Mc-Graw-Hill. 2017 5. The Django Tutorial https://www.djangoproject.com/ 6. The Python Tutorial at https://docs.python.org/3/tutorial/index.html	

- To give a more professional s/w development skills and practices followed for real software development.
- How large scale software maintained and the use of various tools.

22/11/17 22/11/17

Signature of the proposer (s):

(Dr. Atul Gupta) (Dr. M.K. Banshi)

2H2
27/11/17

4.11.17 078

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: 10% to maintain continuity
4. Course is assigned CS303L number already assign no.
5. Any other point: The course is with the ... scheme

Forwarded as per the comments written by Dr. Atul Gupta, in order to help students developing professional S/W. This will help to develop inhouse ERP system.

(Head, CSE Discipline)
27/11/17

Recommendation of the APCS

Recommended/Not recommended

(Member1) 29/12/17 (Member2) 29/12/17 (Member3) (Member4) 3/1/18 (Member5) 3.1.18 (Convener) 3/1/18

3/1/18
Dean Academic

✓
Approved/ Not Approved

4.1.18
Chairperson Senate

1591 12/12/17

RDD 9 wills SC discussed ...

12/12/17 Head CSE Discussed 14/12/17

Dean (A)

1210162

To

The Dean Academic
IIITDM Jabalpur

Through – ~~DPGC~~, CSE

Forwarded.
Padhy
25/7/17

Sub: Permission to carryout PhD defence examination of Mr Jitendra Singh Thakur (Roll No 1210162), with Prof Ashish Ghosh, Professor ISI Kolkata, as the external examiner

Ref – The mail correspondence with Prof R Mall, Professor, IIT Kharagpur (enclosed)

Dear Dr Padhy,

As you are aware of, the Indian examiner of Mr Jitendra's PhD Thesis has communicated his inability to come over here for the PhD defence in the following several months. As Prof Ashish Ghosh is coming for a PhD defence examination of some other candidate (Ms R Jyothi) of the discipline on August 4-5, 2017, I request you to permit us to hold Mr Jitendra's thesis defence during the visit of Prof Ghosh.

Thanking you,

Sincerely,

24/7/17
Dr Atul Gupta
Supervisor

Recommended for approval
Padhy
26/7/17

Chairperson/ Senate
Appd
Padhy
31/7/17

138
25/7/17

As instructed, putup on 27-7-17
For ref. consent of prof Ghosh may pls be attached
Date & time of thesis defence may also be mentioned.

27-7-17
A. R. Dir

Dr A. Gupta

1. Ref consent of Prof Ghosh is attached
2. The date is Aug 5, 2017 and the time will be decided in consultation with Prof Ojha, a/h

Approval is granted
28/7/17

Dean (Acad)

279
26/7/17

076
28/7/17

1097
18/17

Sd/- Senate Meeting
28-7-17

Recommended & forwarded
Sraban
11/7/2017

To,
The Dean Academic,
PDPM-IIITDMJ,
Jabalpur.

Through Thesis Supervisor

Subject: Request for conversion of my status from full time Ph.D. student to external category

Respected Sir,

I am Rohit Ahuja, Ph.D. student in CSE discipline, IIITDM Jabalpur, working under the supervision of Dr. Sraban kumar Mohanty. It is my pleasure to inform you that I had applied for a faculty position in NIT (National Institute of Technology) Raipur, and have been selected for the same.

I have completed my course work, teaching credits, progress seminar and intended to join the aforementioned position. I humbly request to kindly convert my Ph.D status from regular to an external category.

11/7/2017

Yours obediently,
Rohit Ahuja
PhD student in CSE
Roll No - 1220183

Enclosures:
1. NOC issued to apply for Job
2. Offer Letter

Through HOD (CSE)

forwarded
Sraban (Incharge)
12/7/17

Joining deed
He has join the Institute
on Jan, 2013
Sraban

Mo. No.
9425307905.

open seminar
125
12/7/17

The student has completed the open seminar on 27/8/17 and also registered in this current semester. He got a faculty position in NIT, Raipur. So it is recommended to allow him 3 month time to submit his thesis from NIT Raipur.

Sraban 8/8/17

Chairperson Senate

put up on 21-8-17
Kindly attach copy of relevant guidelines of PG manual for reference.

21-8-17
Ar. Dir

Dean Academic

The student has completed all minimum requirements to convert to external. The guidelines of conversion program is attached.

24/8/17

Director

Appd as per rules

25/8/17

1339
25/8/17

DR(A)

28.08.17

Date: 17/07/2017

To,
The Dean Academic,
PDPM-IIITDM Jabalpur

Through,
Thesis Supervisor,
PDPM-IIITDM Jabalpur

Sub: Request to convert my Ph. D. programme as an external student.

Respected Sir,

With reference to my previous application (i.e., NOC to apply for job openings) dated 04th April 2017; I am pleased to inform you that I have been selected as "SoC Design Engineer" in Intel Tech. India Pvt. Ltd. Bangalore as a full time employee. I need to fulfill my family financial conditions and to support my father's health expenses.

In this concern, I want to state that I have fulfilled all the minimum requirements to continue as an external Ph.D. student of the Institute. Therefore, I put my humble request to you that kindly allow me to continue my Ph.D. programme as an external student.

I will be highly obliged to you.

Thanking you,

Enclosures: Copy of

1. NOC to apply for job openings
2. Appointment Letter

Your's faithfully,

Sunil Kumar Pandey
Ph.D. Research Scholar,
Roll No-1210270 (ECE)
PDPM-IIITDM Jabalpur

1

- prep on 21-8-17
- Kindly attach copy of relevant guidelines &
  PG manual for reference.

21-8-17
Dy Reg Dir

Dean Academic

The student has completed all minimum requirements as carried to external the guidelines of conversion program is attached.

24/8/17

Director

Appd as per rules

25/8/17

DREA

29.08.17

November 28, 2017

Report of the committee for the cheating case (Ref. no.: IIITDMJ/DR (Acad.)/2017/11/1536, dated November 22, 2017).

1. The course related material including PDF files and Instructor's class lectures notes in ppt form has been found in the apps open in the given Smart Phone.
2. There are sufficient reasons for the committee to believe that the student was copying from the smart phone during the examination.
3. Action may be taken as per the UG guidelines of the Institute.

Note: Answer sheet and the smart phone are returned herewith.

Dr. Irshad Ahmad Ansari | Dr. Matadeen Bansal | Dr. S. K. Mohanty

committee is requested to recommend possible course of action.

23/11/17

Penalty of NO action is mentioned in clause NO-10.1.6 of UG manual. It is mentioned that committee can only investig the matter. Possible course of actions are mentioned for Instructor only not for investing committee.

30/11/17

Dean(Acad) It is requested to recommend course of action.

30/11/17

Dr. S. K. Mohanty, Dr. M. Bansal

In my opion, the instruction of the course should be requested to decide the course of action against the cheating case. Since he was is also the member of the committee as well as the investigator, his recommendation would be abide by the committee.

Sraban
30/11/17

Dean (Acad)

of committee report;)

recommend following actions"

1. The marks of the end sem exam should be made zero as the student was found cheating in exam.
2. The final grade in the subject should be made lower by one level.

30/11/17

The committee and inspector recommends to make the marks of end sem zero and lower one grade.
As per the clause 10.1.6, it is recommended to make the marks of endsem exam zero.

30/11/17

Chairperson Senate

30/11/17

simanta simanta <simanta@iiitdmj.ac.in>

Fwd: Re: Approval to substitute DS 328 Design "Forecasting and Trend Research" with MN 302 "Fabrication Project" for BDes Semester

dean.acad dean.acad <dean.acad@iiitdmj.ac.in> Mon, Sep 10, 2018 at 5:42 PM
To: Simanta <simanta@iiitdmj.ac.in>

---------- Forwarded message ----------
From: **santosh santosh** <santosh@iiitdmj.ac.in>
Date: Thu, Jan 4, 2018 at 2:59 PM
Subject: Fwd: Re: Approval to substitute DS 328 Design "Forecasting and Trend Research" with MN 302 "Fabrication Project" for BDes Semester
To: shailesh <shailesh@iiitdmj.ac.in>
Cc: headdesign headdesign <headdesign@iiitdmj.ac.in>, "dean.acad dean.acad" <dean.acad@iiitdmj.ac.in>, dracad dracad <dracad@iiitdmj.ac.in>

श्री शैलेश,

आवश्यक कार्यवाही हेतु प्राप्त ईमेल अग्रेषित किया जा रहा है।

धन्यवाद

संतोष महोबिया

---------- Forwarded message ----------
From: "Sanjeev Deshmukh" <director.jbp@gmail.com>
Date: Jan 4, 2018 2:09 PM
Subject: Re: Approval to substitute DS 328 Design "Forecasting and Trend Research" with MN 302 "Fabrication Project" for BDes Semester
To: "santosh santosh" <santosh@iiitdmj.ac.in>, "registrar registrar" <registrar@iiitdmj.ac.in>
Cc:

Approved as proposed
SGD

On 4 January 2018 at 12:00, santosh santosh <santosh@iiitdmj.ac.in> wrote:

Chairperson Senate,
PDPM-IIITDM,Jabalpur

Respected Sir,
Please find attached letter of HoD Design on the subject cited above.

- Letter of HoD Design may please be seen.
- As per the submission of HoD Design- *We request you to kindly allow substitution of **DS 328 Design Forecasting and Trend Research** with **MN 302 Fabrication Project** for this batch of BDes 6th Semester students only. Next year onward both **BTech** and **BDes** students would be following the revised curriculum and there would be no discrepancy.The above issue has been discussed internally in the Design Discipline and has been agreed upon.*
- *Same is recommended by Dean,Academic to accord approval for this batch only.*

Putup for perusal and further orders,please

Kind regards,

S. Mahobia

Dr Prabin Kumar Padhy
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, deanacadiiitdmj2016@gmail.com

Website: www.iiitdmj.ac.in