

VISHNU INSTITUTE OF TECHNOLOGY: BHIMAVARAM
(AUTONOMOUS)

Ref.No. VIT/AS/ACD/ /2021

Date:06-01-2021

ACADEMIC CALENDAR FOR I B.TECH -I & II SEMESTER

The Academic Calendar for I B.Tech -I & II Semester for the Academic Year 2020-21.

I B.Tech I Semester (2020 Admitted Batch)			
Description	From	To	Duration (Weeks)
Commencement of Class Work	06-01-2020		
I Unit of Instructions	06-01-2021	20-02-2021	8W
II Unit of Instructions	22-02-2021	13-03-2021	3W
I Mid Examinations	15-03-2021	20-03-2021	1W
II Unit of Instructions(Continuation)	22-03-2021	10-04-2021	5W
II Mid Examinations	26-04-2021	01-05-2021	1W
Grand Test & Practical Examinations	03-05-2021	08-05-2021	1W
End Examinations	10-05-2021	22-05-2021	2W
Commencement of Class Work	24-05-2021		
I B.Tech II Semester (2020 Admitted Batch)			
Description	From	To	Duration (Weeks)
I Unit of Instructions	24-05-2021	10-07-2021	7W
I Mid Examinations	12-07-2021	17-07-2021	1W
II Unit of Instructions	19-07-2021	04-09-2021	7W
II Mid Examinations	06-09-2021	11-09-2021	1W
Grand Test & Practical Examinations	13-09-2021	18-09-2021	1W
End Examinations	20-09-2021	02-10-2021	2W
Commencement of II B.Tech I Semester Class work	04-10-2021		
<i>Note: Calendar is prepared with 8hrs/day 7 weeks per instruction period</i>			


DEAN EVALUATION

Vishnu Institute of Technology (Autonomous)
Vishnupur, Bhimavaram-534202


PRINCIPAL

Vishnu Institute of Technology
Vishnupur, Bhimavaram-534202

: All HODs with a request to follow the above schedules and also inform to all the staff

Copy to : Director (Admin), SVES for favour of information

” : Principal Office, VIT

” : Controller of Examinations, VIT

” : I B.Tech In Charge, VIT

” : Warden, Canteen I/C & Security officer-SVES

VISHNU INSTITUTE OF TECHNOLOGY: BHIMAVARAM

(AUTONOMOUS)

Ref.No. VIT/AS/ACD/ /2020

Date:30-12-2020

ACADEMIC CALENDAR FOR II B.TECH -I & II SEMESTER

The Academic Calendar for II B.Tech -I & II Semester for the Academic Year 2020-21.

II B.Tech I Semester (2019 Admitted Batch)			
Description	From	To	Duration (Weeks)
Commencement of Class Work	09-11-2020		
I Unit of Instructions	09-11-2020	02-01-2021	8W
II Unit of Instructions	04-01-2021	13-02-2021	6W
I Mid Examinations	15-02-2021	20-02-2021	1W
II Unit of Instructions (Continued...)	22-02-2021	06-03-2021	2W
II Mid Examination	08-03-2021	13-03-2021	1W
Grand Test & Practical Examinations	15-03-2021	20-03-2021	1W
End Examinations	22-03-2021	03-04-2021	2W
Commencement of Class Work	05-04-2021		
II B.Tech II Semester (2019 Admitted Batch)			
Description	From	To	Duration (Weeks)
I Unit of Instructions	05-04-2021	22-05-2021	7W
I Mid Examinations	24-05-2021	26-05-2021	1/2W
II Unit of Instructions	27-05-2021	07-07-2021	7W
II Mid Examination	08-07-2021	10-07-2021	1/2W
Grand Test & Practical Examinations	12-07-2021	17-07-2021	1W
End Examinations	19-07-2021	31-07-2021	2W
Commencement of III B.Tech I Semester Class work	02-08-2021		

Note: Calendar is prepared with 8hrs/day 7 weeks per instruction period


DEAN EVALUATION
Dean Evaluation

Vishnu Institute of Technology (Autonomous)
Vishnupur, BHIMAVARAM-534 202.


PRINCIPAL
PRINCIPAL

Vishnu Institute of Technology
Vishnupur, Bhimavaram-534202

To : All Notice Boards

: All HODs with a request to follow the above schedules and also inform to all the staff

Copy to : Director (Admin), SVES for favour of information

” : Principal Office, VIT

” : Controller of Examinations, VIT

” : II B.Tech In Charge, VIT

” : Warden, Canteen I/C & Security officer-SVES



Directorate of Academic Planning
JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
KAKINADA-533003, Andhra Pradesh, INDIA
(Established by AP Government Act No. 30 of 2008)

Lr. No. 02-08/JNTUK/DAP/AC/II-III-IV Year/B. Arch 2020-21

Date: 29-12-2020

Dr. R. Srinivasa Rao,
Director, Academic Planning
JNTUK, Kakinada

To
All the Principals of Affiliated Colleges,
JNTUK, Kakinada.

Academic Calendar for II, III and IV Year - B. Arch
Academic year 2020-21

I SEMESTER			
Description	From	To	Weeks
Commencement of Class Work	02.11.2020		
I Unit of Instruction	02.11.2020	19.12.2020	7W
II Unit of Instructions	21.12.2020	23.01.2021	5W
I Mid Examinations	25.01.2021	30.01.2021	1W
II Unit of Instructions(Continued)	01.02.2021	20.02.2021	3W
II Mid Examinations	22.02.2021	27.02.2021	1W
Preparation & Practicals	01.03.2021	06.03.2021	1W
End Examinations	08.03.2021	20.03.2021	2W
Commencement of II Semester Class Work	22.03.2021		
II SEMESTER			
I Unit of Instructions	22.03.2021	08.05.2021	7W
I Mid Examinations	10.05.2021	12.05.2021	1/2W
II Unit of Instructions	13.05.2021	30.06.2021	7W
II Mid Examinations	01.07.2021	03.07.2021	1/2W
Preparation & Practicals	05.07.2021	10.07.2021	1W
End Examinations	12.07.2021	24.07.2021	2W
Commencement of next Year Class Work			
<i>Note: Calendar is prepared with 8 hrs/day hence 7 weeks per instruction period</i>			

R. Srinivasa Rao
Director Academic Planning

Copy to the Secretary to the Hon'ble Vice Chancellor, JNTUK
Copy to Rector, JNTUK
Copy to Registrar, JNTUK
Copy to Director Academic Audit, JNTUK
Copy to Director of Evaluation, JNTUK

VISHNU INSTITUTE OF TECHNOLOGY::BHIMAVARAM
(AUTONOMOUS)

Ref.No. VIT/AS/ACD/ /2021

Date: 19-02-2021

ACADEMIC CALENDAR FOR I M.TECH -I & II SEMESTER

The Academic Calendar for I M.TECH -I & II Semester for the Academic Year 2020-21.

I M.TECH I Semester (2020 Admitted Batch)			
Description	From	To	Duration (Weeks)
Commencement of Class Work	22-02-2021		
I Unit of Instructions	22-02-2021	10-04-2021	7W
I Mid Examinations	05-04-2021	10-04-2021	1W
II Unit of Instructions	12-04-2021	29-05-2021	7W
II Mid Examination	24-05-2021	29-05-2021	1W
Preparation & Practical Examinations	31-05-2021	05-06-2021	1W
End Examinations	07-06-2021	19-06-2021	2W
Commencement of II Semester Class Work	21-06-2021		
I M.TECH II Semester (2020 Admitted Batch)			
I Unit of Instructions	21-06-2021	07-08-2021	7W
I Mid Examinations	02-08-2021	07-08-2021	1W
II Unit of Instructions	09-08-2021	25-09-2021	7W
II Mid Examination	20-09-2021	25-09-2021	1W
Preparation & Practical Examinations	27-09-2021	02-10-2021	1W
End Examinations	04-10-2021	16-10-2021	2W
Commencement of next Year Class work	18-10-2021		
<i>Note: Calendar is prepared with 8hrs/day 7 weeks per instruction period</i>			


DEAN EVALUATION
Dean Evaluation

Vishnu Institute of Technology (Autonomous)
Vishnupur, BHIMAVARAM-534 202.


PRINCIPAL
PRINCIPAL

Vishnu Institute of Technology
Vishnupur, Bhimavaram-534202

To : All Notice Boards

: All HODs with a request to follow the above schedules and also inform to all the staff

Copy to : Director (Admin), SVES for favour of information

” : Principal Office, VIT

” : Controller of Examinations, VIT

” : I M.Tech In Charge, VIT

” : Warden, Canteen I/C & Security officer-SVES

VISHNU INSTITUTE OF TECHNOLOGY::BHIMAVARAM
(AUTONOMOUS)

Ref.No. VIT/AS/ACD/ /2021

Date: 19-02-2021

ACADEMIC CALENDAR FOR I MBA -I & II SEMESTER

The Academic Calendar for I MBA -I & II Semester for the Academic Year 2020-21.

I MBA I Semester (2020 Admitted Batch)			
Description	From	To	Duration (Weeks)
Commencement of Class Work	22-02-2021		
I Unit of Instructions	22-02-2021	10-04-2021	7W
I Mid Examinations	05-04-2021	10-04-2021	1W
II Unit of Instructions	12-04-2021	29-05-2021	7W
II Mid Examination	24-05-2021	29-05-2021	1W
Preparation & Practical Examinations	31-05-2021	05-06-2021	1W
End Examinations	07-06-2021	19-06-2021	2W
Commencement of Class Work	21-06-2021		
I MBA II Semester (2020 Admitted Batch)			
Description	From	To	Duration (Weeks)
I Unit of Instructions	21-06-2021	07-08-2021	7W
I Mid Examinations	02-08-2021	07-08-2021	1W
II Unit of Instructions	09-08-2021	25-09-2021	7W
II Mid Examination	20-09-2021	25-09-2021	1W
Preparation	27-09-2021	02-10-2021	1W
End Examinations	04-10-2021	16-10-2021	2W
Commencement of II MBA I Semester Class work	18-10-2021		
<i>Note: Calendar is prepared with 8hrs/day 7 weeks per instruction period</i>			


DEAN EVALUATION
Dean Evaluation

Vishnu Institute of Technology (Autonomous)
Vishnupur, BHIMAVARAM-534202.


PRINCIPAL

PRINCIPAL
Vishnu Institute of Technology
Vishnupur, Bhimavaram-534202

To : All Notice Boards

: All HODs with a request to follow the above schedules and also inform to all the staff

Copy to : Director (Admin.), SVES for favour of information

” : Principal Office, VIT

” : Controller of Examinations, VIT

” : I MBA In Charge, VIT

” : Warden, Canteen I/C & Security officer-SVES

VISHNU INSTITUTE OF TECHNOLOGY: BHIMAVARAM
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

LESSON PLAN

Faculty Name: B.PRUDHVI RAJ
Designation: Asst. Prof
Regulation: R19
Subject: Signals & Systems

Subject Code: 19EC3T02
Branch: ECE
Year/Sem: II-I
Section: ECE-B

S. No	No. of Hours	Date	Topic	Reference Book-Page No.	COs
UNIT I: INTRODUCTION					
1	1	09.11.20	Mathematical fundamentals	Internet	CO1
2		09.11.20	Definition of Signals and Systems	R1-1-2	
3	1	10.11.20	Classification of Signals	R1-16 to25	
4	1	12.11.20	Problems on Classification of Signals	R1-16 to25	
5	1	13.11.20	Classification of Systems	T2-74 to 86	
6	1	16.11.20	Causality and Stability Conditions	T2-74 to 86	
7	1	17.11.20	Problems on Classification of Systems	T2-74 to 86	
8	1	19.11.20	Operations on signals: shifting, Scaling	R1-25 to 34	
9	1	20.11.20	Singularity functions and related functions	T2-60 to 68	
10			Complex exponential and sinusoidal signals	T2-44 to 60	
No. of Hours Required: 08					
UNIT II: SIGNAL ANALYSIS AND FOURIER SERIES					
11	1	21.11.20	Analogy between vectors and signals	T1-44 to 53	CO2
12			Orthogonal signal space	T1-53	
13	1	23.11.20	Signal approximation using orthogonal functions, Mean square error	T1-54 T1-55	
14	1	24.11.20	Closed or complete set of orthogonal functions	T1-56 to 58	
15	1	26.11.20	Orthogonality in complex functions	T1-58	
16	1	27.11.20	Fourier series representation of continuous-time periodic signals	T2- 216 to 225	
17	2	28.11.20 30.11.20	Properties of Fourier series	T2- 232 to 240	
18	1	01.12.20	Dirichlet's conditions	T2- 251 to 253	
19	1	03.12.20	Trigonometric Fourier series	T1-69	
20	1	04.12.20	Exponential Fourier series	T1-69	
21	1	05.12.20	Complex Fourier spectrum	T1-89 to 98	
22	1	07.12.20	Fourier transform of arbitrary signal	T1 -105 to 109	
No. of Hours Required: 12					
UNIT III: FOURIER TRANSFORM					
23	1	08.12.20	Fourier transform of standard signals	T1 – 112 to 116	CO2
24	1	10.12.20	Fourier transform of periodic signals	T1 – 123 to 129	
25	1	11.12.20	Properties of Fourier transforms	T1 – 136 to 149	
26	1	12.12.20	Fourier transforms involving impulse function	T1 - 158	

			and Signum function		
27	1	14.12.20	Introduction to Hilbert Transform	T1 -123	
28	1	15.12.20	Related Problems	Exercise	
No. of Hours Required: 06					
UNIT IV: ANALYSIS OF LINEAR SYSTEMS					
29	1	17.12.20	Linear system, impulse response, Response of a linear system	T1 -1 to 11 T1 – 235	CO3
30	1	19.12.20	Linear time-invariant (LTI) system, Linear time-variant (LTV) system,	R1 – 61	
31	1	21.12.20	Concept of convolution in time domain and frequency domain	R1 - 260	
32	1	22.12.20	Graphical representation of convolution	T1 – 400	
33	1	24.12.20	Transfer function of a LTI system	T1 -26 to 38	
34	1	26.12.20	Filter characteristics of linear systems	T1 - 245 to 248	
35	1	28.12.20	Distortion less transmission through a system	T1 – 248	
36	1	29.12.20	Signal bandwidth, System bandwidth, Ideal LPF, HPF and BPF characteristics	T1 – 249 T1 – 250	
37	1	31.12.20	Causality and Paley-Wiener criterion for physical realization	T1 – 252 to 254	
38	1	02.01.21	Relationship between bandwidth and rise time	internet	
39	3	04.01.21 05.01.21 07.01.21	Problems	Exercise	
No. of Hours Required: 13					
UNIT V: LAPLACE TRANSFORM					
40	3	09.01.21 11.01.21 12.01.21	Review of Laplace transforms, Partial fraction expansion	T1 – 181 T1 – 212 to 221	CO2
41	2	18.01.21 19.01.21	Inverse Laplace transform	T2 – 700	
42	2	21.01.21 23.01.21	Concept of region of convergence (ROC) for Laplace transforms,	R1 - 512	
43	2	25.01.21 28.01.21	Constraints on ROC for various classes of signals	T2 - 692	
44	3	29.01.21 30.01.21 01.02.21	Properties of L.T's, Relation between L.T's, and F.T. of a signal	T1 – 181 to 185 T1 – 188 to 180	
45	2	02.02.21 04.02.21	Laplace transform of certain signals using waveform synthesis	Internet	
46	1	05.02.21	Problems	Exercise	
No. of Hours Required: 15					
UNIT VI: SAMPLING AND Z-TRANSFORM					
47	1	06.02.21	Sampling theorem – Graphical and analytical proof for Band Limited Signals	T2 - 544	CO4
48	2	08.02.21 09.02.21	Impulse sampling, Natural and Flat top Sampling	T2 -575	
49	1	11.02.21	Reconstruction of signal from its samples	R1 - 371	
50	1	12.02.21	Effect of under sampling – Aliasing, Introduction to Band Pass sampling	T2 – 557 T2 – 545	

51	1	13.02.21	Problems	Exercise	CO5
52	1	15.02.21	Concept of Z- Transform of a discrete sequence, Distinction between Laplace, Fourier and Z -transforms	T2 – 771 R2 – 564	
53	2	16.02.21 18.02.21	Region of convergence in Z-Transform, constraints on ROC for various classes of signals	T2 – 778 R1 - 561	
54	2	19.02.21 20.02.21	Properties of Z-transforms	T2 – 797 to 804	
55	1	22.02.21	Inverse Z-transform	T2 – 787	
56	1	23.02.21	Problems	Exercise	
No. of Hours Required: 13					
Total No. of Hours Required: 67					

TEXT BOOKS:

T1. Signals, Systems & Communications - B.P. Lathi, BS Publications, 2003.

T2. Signals and Systems - A.V. Oppenheim, A.S. Willsky and S.H. Nawab, PHI, 2nd Edn.

REFERENCES BOOKS:

R1. Signals & Systems - Simon Haykin and Van Veen, Wiley, 2nd Edition.

R2. Signals & Systems- K .R. Rajeswari and B.V.Rao, PHI 2009.

R3. Fundamentals of Signals and Systems- Michel J. Robert, MGH International Edition, 2008.

R4. Signals and Systems – A Rama Krishna Rao, Tata McGrawHills

OUTCOMES:

At the end of this course the student will able to:

CO1: Understand and differentiate among various classes of signals and Systems

CO2: Analyze the continuous-time signals and continuous-time systems using Fourier series, Fourier transform and Laplace transform.

CO3: Understand the relationships among the various representations of LTI systems

CO4: Apply sampling theorem to convert continuous-time signals to discrete-time signal and reconstruct back.

CO5: Apply z-transform to analyze discrete-time signals and systems.