

An Online Meeting for B.Tech CSE was held on 17.4.2021. Following members were present online:


1. Prof.Pankaj Madan, Dean FET
2. Prof.M.M.S Rauthan, Professor HNB Grahwal University, Srinagar
3. Prof. Amit Agarwal, Director A.P.J Abdul Kalam Institute, Tankapur
4. Dr.Mayank Aggarwal, HOD, CSE,FET
5. Dr.Nishant, A.P.,CSE,FET
6. Dr.Suyash Bhardwaj, A.P.,CSE,FET
7. Mr.Namit Khanduja, A.P.,CSE,FET

Following observation and recommendations were made:

- 1) Syllabus of third year and final year was finalized as per the attached structure after implementing suggestions from expert and all members.
- 2) In Final year MOOCS courses were introduced.
- 3) Special emphasis was given to make the syllabus as per need of Industry, the subjects suggested by Dr.Mani Madhukar,IBM (Industry representative) were introduced.
- 4) The codes were redesigned to avoid clashes with existing and previous codes.



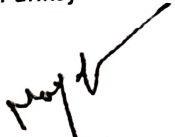
Prof. Pankaj Madan



Prof.M.M.S Rauthan



Prof .Amit Agarwal



Dr. Mayank Aggarwal



Dr. Suyash Bhardwaj



Dr. Nishant



Mr. Namit Khanduja

Batch 2019-2023 and onwards

w.e.f. 2021(Revised 17/4/21)

**CHOICE BASED CREDIT SYSTEM
EVALUATION SCHEME
AND
COURSE OF STUDY
IN
B.TECH.
COMPUTER SCIENCE AND ENGINEERING
(V SEMESTER & VI SEMESTER)
SCHEME OF EXAMINATION & SYLLABUS**



**FACULTY OF ENGINEERING AND TECHNOLOGY
GURUKULA KANGRI DEEMED TO BE UNIVERSITY,
HARIDWAR**

Maya
Anita
ACADEMIC SESSION 2021-22

(Effective from the academic session 2021-22)
GURUKULA KANGRI (DEEMED TO BE UNIVERSITY), HARIDWAR
 Faculty of Engineering & Technology
 Computer Science & Engineering
 B. Tech. Third Year
 Syllabus in accordance with AICTE Model Curriculum

SEMESTER-V											
DSC/SEC/DS E/AEC	SUBJECT	PERIODS			EVALUATION SCHEME				Subject Total	Credits	
					SESSIONAL EVALUATION			EXAM ESE			
		L	T	P	CT	TA	Total				
THEORY											
BCE-C511	Computer Network	3	1	0	20	10	30	70	100	4	
BCE-C512	Advance Data Structure	3	1	0	20	10	30	70	100	4	
BCE-C513	Design & Analysis of Algorithm	3	1	0	20	10	30	70	100	4	
BCE-C514	Cloud Computing	3	1	0	20	10	30	70	100	4	
BCE-M001	Universal Human Values	3	0	0	20	10	30	70	100	0	
BCE-P5XX	Program Elective - I	3	0	0	20	10	30	70	100	3	
BCE-O5XX	Open Elective - I	3	0	0	20	10	30	70	100	3	
PRACTICAL											
BCE-C561	Advance Data Structure Lab	0	0	2	10	5	15	35	50	1	
BCE-C562	Cloud Computing Lab	0	0	2	10	5	15	35	50	1	
BCE-S570	Summer Training and Internship Program-II Presentation*	0	0	2	10	5	15	35	50	1	
		TOTAL CREDITS									
TOTAL		18	0	6	140	70	225	525	750	25	

*For the Summer Training and Internship program done in summer break after IV semester examination, A certificate of completion to be submitted along with the presentation in the department. In case a student is unable to do an internship in some company, he may do any one extra online skill enhancement course.

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SEMESTER-V

DSC/SEC/DS E/AEC	SUBJECT	PERIODS			EVALUATION SCHEME				Subject Total	Credits
					SESSIONAL EVALUATION			EXAM ESE		
		L	T	P	CT	TA	Total			
THEORY										
BCE-C511	Computer Network	3	1	0	20	10	30	70	100	4
BCE-C512	Advance Data Structure	3	1	0	20	10	30	70	100	4
BCE-C513	Design & Analysis of Algorithm	3	1	0	20	10	30	70	100	4
BCE-C514	Cloud Computing	3	1	0	20	10	30	70	100	4
BCE-M001	Universal Human Values	3	0	0	20	10	30	70	100	0
BCE-P5XX	Program Elective - I	3	0	0	20	10	30	70	100	3
BCE-O5XX	Open Elective - I	3	0	0	20	10	30	70	100	3
PRACTICAL										
BCE-C561	Advance Data Structure Lab	0	0	2	10	5	15	35	50	1
BCE-C562	Cloud Computing Lab	0	0	2	10	5	15	35	50	1
BCE-S570	Summer Training and Internship Program-II Presentation*	0	0	2	10	5	15	35	50	1
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Program Elective Subject List- II

BCE-P614	Machine Learning - 2
BCE-P615	Advance Database Management System
BCE-P616	Software Project Management
BET-P617	Digital Signal Processing
BCE-P618	High Performance Computer Architecture
BCE-P619	Full Stack Web Development
BCE-P620	Data Analytics -2
BCE-P621	Cyber Forensics
BCE-P622	Augmented Reality and Virtual Reality

Open Elective -II

BCE-O630	Applied AI
BET-O631	Digital Image Processing
BCE-O632	Industrial Economics and Business Administration
BCE-O633	Introduction to Data Science and Design Thinking
BCE-O634	Data Mining
BCE-O635	Natural Language Processing
BCE-O636	E-commerce & Social Media Analysis
BCE-O637	Java Programming and Introduction to Python**
BCE-O657	Java Programming and Introduction to Python Lab**

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Program Elective Subject List- II

BCE-P614	Machine Learning - 2
BCE-P615	Advance Database Management System
BCE-P616	Software Project Management
BET-P617	Digital Signal Processing
BCE-P618	High Performance Computer Architecture
BCE-P619	Full Stack Web Development
BCE-P620	Data Analytics -2
BCE-P621	Cyber Forensics
BCE-P622	Augmented Reality and Virtual Reality

Open Elective -II

BCE-O630	Applied AI
BET-O631	Digital Image Processing
BCE-O632	Industrial Economics and Business Administration
BCE-O633	Introduction to Data Science and Design Thinking
BCE-O634	Data Mining
BCE-O635	Natural Language Processing
BCE-O636	E-commerce & Social Media Analysis
BCE-O637	Java Programming and Introduction to Python**
BCE-O657	Java Programming and Introduction to Python Lab**

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**CHOICE BASED CREDIT SYSTEM
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(VII SEMESTER & VIII SEMESTER)
SCHEME OF EXAMINATION & SYLLABUS**



**FACULTY OF ENGINEERING AND TECHNOLOGY
GURUKULA KANGRI DEEMED TO BE UNIVERSITY,
HARIDWAR**

Maya
Amid **ACADEMIC SESSION 2021-22** *RD*

(Effective from the academic session 2022-23)
GURUKULA KANGRI (Deemed to be University), HARIDWAR
 Faculty of Engineering & Technology
 Computer Science & Engineering

B. Tech. Fourth Year
 Syllabus in accordance with AICTE Model Curriculum

SEMESTER-VII

C/SEC/DSE/ AEC	SUBJECT	PERIODS			EVALUATION SCHEME				Subject Total	Credits
					SESSIONAL EVALUATION			EXA M ESE		
		L	T	P	CT	TA	Tota I			
THEORY										
E-C711	Compiler Design	3	1	0	20	10	30	70	100	4
E-C712	Linux System Administration	3	1	0	20	10	30	70	100	4
E-P7XX	Program Elective -III	3	0	0	20	10	30	70	100	3
E-O7XX	Open Elective -III /	3	0	0	20	10	30	70	100	3
PRACTICAL										
E-C762	Linux System Administration Lab	0	0	2	10	5	15	35	50	1
E-P770	Minor Project with research paper	0	0	8	20	10	30	70	100	6
TOTAL CREDITS										
TOTAL		12	2	12	120	60	180	490	600	21

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Program Elective Subject List - III

BCE-P713	Wireless Networks
BCE-P714	Information and Network Security
BCE-P716	Human Computer Interaction
BCE-P717	Block Chain
BCE-P718	Deep Learning
BCE-P719	Fuzzy logic and Neural Networks
BCE-P720	Real Time Operating System
BET-P721	Internet of Things

Open Elective -III

BCE-O731	Optimization Techniques in Computing
BCE-O732	Parallel and Distributed System
BCE-O733	Adhoc and Sensor Networks
BET-O734	BioMedical Signal Processing
BCE-O735	Ecommerce
BCE-O736	Human Resource and Organization Behaviour
BCE-O737	Soft Computing
BCE-O738	Storage Management
BCE-O739	Quantum Computing
BCE-O740	Computer Vision
BCE-O741	AI in Healthcare
BCE-O742	Neural Networks and Deep Learning

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(Effective from the academic session 2022-23)
GURUKULA KANGRI VISHWAVIDYALAYA (Deemed to be University), HARIDWAR
 Faculty of Engineering & Technology
 Computer Science & Engineering

B. Tech. Fourth Year
 Syllabus in accordance with AICTE Model Curriculum

SEMESTER-VIII

DSC/SEC/DS E/AEC	SUBJECT	PERIODS			EVALUATION SCHEME				Subject Total	Credits
					SESSIONAL EVALUATION			EXA M ESE		
		L	T	P	CT	TA	TOTAL			
THEORY										
BCE-08XX	MOOC-I	3	1	0	20	10	30	70	100	4
BCE-08XX	MOOC-II	3	1	0	20	10	30	70	100	4
BCE-08XX	MOOC-III	3	1	0	20	10	30	70	100	4
PRACTICAL										
BCE-P861	Major Project with Research paper	0	0	16	0	100	100	300	400	6+3
TOTAL CREDITS										
TOTAL		12	4	16	60	130	190	510	700	21

List of MOOC courses shall be decided by the departmental committee in each semester depending upon the list from SWAYAM/NPTEL and other recognized online platforms. Students have to study from Online Platform doubt sessions shall be held by Internal teachers and exams shall be taken by university. If a student wishes he can give exam of Online Platform for certification. SWAYAM courses to run every year from July onwards (Odd Semester) are declared in the month of May and for courses to run every year from January onwards (Even Semester) are declared in the month of December on website <https://swayam.gov.in/>.

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