

**MINUTES OF 14th MEETING
OF
BOARD OF STUDIES (BOS)

DEPARTMENT OF
COMPUTER ENGINEERING &
APPLICATIONS**



GLA
UNIVERSITY
MATHURA
Established vide U.P. Act 21 of 2010.

JUNE 12th, 2020

Department of Computer Engineering & Applications

GLAU/CEA/BOS/2019-20/01

12.06.2020

Members Present:

- | | |
|--|---------------------------|
| 1. Mr. Rajesh Singh, HCL Pvt.Ltd. | 13. Dr. Hitendra Garg |
| 2. Mr. Kishore Kunal, Alumni, Dragonlearn.in | 14. Dr. Suresh Raikwar |
| 3. Mr. Suresh Singh, Director T&D | 15. Dr. Ashish Sharma |
| 4. Mr. Atul Bansal, CoE | 16. Dr. Nitin Tyagi |
| 5. Dr. Pooja Pathak, Maths | 17. Dr. Shashi Shekhar |
| 6. Prof. Anand Singh Jalal | 18. Dr. Rohit Agrawal |
| 7. Prof. Charu Bhatnagar | 19. Dr. Mayank Srivastava |
| 8. Prof. Ashish Sharma | 20. Mr. Neeraj Gupta |
| 9. Prof. Dilip Sharma | 21. Mr. Narendra Mohan |
| 10. Prof. Diwakar Bhardwaj | 22. Mr. Saurabh Anand |
| 11. Prof. Manoj Kumar | 23. Mr. Himanshu Sharma |
| 12. Dr. Anant Ram | 24. Mr. Saurabh Singhal |

The Chairman Board of Studies welcomed all the members and started proceedings of the 14th meeting of BoS in accordance with the Agenda note circulated earlier.

Agenda Item – 14.1: To confirm the minutes of the 13th BoS meeting

The minutes of the meeting of 13th BoS held on May 4th, 2019 were implemented and enclosed as Annexure A.

Agenda Item – 14.2: Action Taken Report (ATR)

The ATR based on the minutes of the 13th BoS were presented.

Agenda Item – 14.3: To consider inclusion of Industrial Internet of Things (IIoT) specialization with B. Tech. (Computer Science & Engg.) and approval of its course structure under CBCS.

The experts and members of BoS critically observed and approved the course structure and syllabus for new specialization i.e. Industrial Internet of Things (IIoT), enclosed as Annexure B.

Agenda Item – 14.4: To consider and approve changes in existing specialization for Cloud Computing and Virtualization.

The experts and members of BoS thoroughly checked and appraised the changes in the following courses of specialization for Cloud Computing and Virtualization, enclosed as Annexure C.

Subjects	Change
Business Process Management (BCSE0504)	Merged as "Cloud and Business Process Management (BCSE0508)"
Cloud Management (BCSE0505)	
Cloud Security (BCSE0506)	Merged as "Cloud Security, Backup & Disaster Recovery(BCSE0509)"
Backup & Disaster Recovery (BCSE0507)	
Container Orchestration and Infrastructure Automation(BCSE0510)	New Inclusion
Devops (BCSE0511)	New Inclusion
Business Process Management Lab (BCSE0533)	Merged as "Cloud and Business Process Management Lab(BCSE0536)"
Cloud Management Lab (BCSE0534)	

Cloud Security Lab (BCSE0535)	Replace by "Cloud Security, Backup & Disaster Recovery Lab (BCSE0537)"
Container Orchestration and Infrastructure Automation Lab (BCSE0538)	New Inclusion
DevOps Lab (BCSE0539)	New Inclusion

Agenda Item – 14.5: To consider and approve change in existing MCA Programme as per AICTE.

As per the AICTE Handbook 2020-21 the Norms for Duration, Entry Level Qualifications of MCA Programme is to be changed from session 2020-21. The experts and members of BoS approved the TWO years MCA Programme. enclosed as Annexure D.

Agenda Item – 14.6: To consider and approve inclusion of variant of following two subjects to cater the student diversity.

- BCSC0003: Database Management System
- BCSC0006: Data Structures & Algorithms

Variants:

- BCSC0014: Applied Database Management System
- BCSC0808: Applied Database Management System Lab
- BCSC0015: Applied Data Structures & Algorithms
- BCSC0809: Applied Data Structures & Algorithms Lab

The experts and members of BoS critically observed and approved the variant of these courses, enclosed as Annexure E.

Agenda Item – 14.7: To consider and approve the shifting of Compiler Design from core subject to programme elective to accommodate more Programme Electives.

The experts and members of BoS approved the changes.

Agenda Item – 14.8: To consider and approve revised syllabi for the courses in B.Tech (CSE), B.Tech (CCV), B.Tech (DA), B.Tech (CSF) and B.Tech (IoT) programmes.

All the members of BoS thoroughly checked and appraised the feedback received from the various stakeholders (Faculty/Employer/Student/Alumni) and the revision/modification in syllabus of existing courses of various programmes is proposed as follows.

Programme	No. of Courses under consideration for revision	Name of the Courses under consideration for revision
B.Tech (CSE)	11	<ul style="list-style-type: none"> • Computer Network • Computer Organization • Computer Organization Lab • Operating System • Operating System Lab • Database Management Systems • Database Management Systems Lab • Data Structure and Algorithms • Data Structure and Algorithms Lab • Software Engineering • Theory of Automata and Formal Languages
B.Tech (CSE) - CCV	11	<ul style="list-style-type: none"> • Computer Network • Computer Organization • Computer Organization Lab

		<ul style="list-style-type: none"> • Operating System • Operating System Lab • Database Management Systems • Database Management Systems Lab • Data Structure and Algorithms • Data Structure and Algorithms Lab • Software Engineering • Theory of Automata and Formal Languages
B.Tech (CSE) - DA	11	<ul style="list-style-type: none"> • Computer Network • Computer Organization • Computer Organization Lab • Operating System • Operating System Lab • Database Management Systems • Database Management Systems Lab • Data Structure and Algorithms • Data Structure and Algorithms Lab • Software Engineering • Theory of Automata and Formal Languages
B.Tech (CSE) - CSF	11	<ul style="list-style-type: none"> • Computer Network • Computer Organization • Computer Organization Lab • Operating System • Operating System Lab • Database Management Systems • Database Management Systems Lab • Data Structure and Algorithms • Data Structure and Algorithms Lab • Software Engineering • Theory of Automata and Formal Languages
B.Tech (CSE) - IoT	11	<ul style="list-style-type: none"> • Computer Network • Computer Organization • Computer Organization Lab • Operating System • Operating System Lab • Database Management Systems • Database Management Systems Lab • Data Structure and Algorithms • Data Structure and Algorithms Lab • Software Engineering • Theory of Automata and Formal Languages
B.Tech (CSE)- AIML	1	<ul style="list-style-type: none"> • Introduction to Artificial Intelligence

The experts and members of BoS approved the same. The details of revised syllabi enclosed in Annexure F.

Agenda Item – 14.9: To consider and approve courses imparting employability/skill development/ entrepreneurship in the B.Tech (CSE), B.Tech (CSE) - CCV, B.Tech (CSE) - DA, B.Tech (CSE) - CSF, B.Tech (CSE) - IoT, B.Tech (CSE) - AIML, B.Tech (CSE) – IIoT, BCA, MCA and M.Tech programmes.

The experts and members of BoS approved the same. The details enclosed in Annexure G.

Agenda Item – 14.10: To consider and approve introduction of new courses in the existing programmes.

Based on the feedback of various stakeholders (Faculty, Alumni, Corporate and Students) department present details of new courses to be introduced. After thorough discussion Board approved the same. The details enclosed in Annexure H.

Agenda Item – 14.11: To consider and approve course recommended by Training & Development Department

Training & Development Department of the University recommended to get the syllabus of one course approved in the Board of Studies Meeting of the department. Same was presented in front of the board. After due discussions, the board approved the same whose details are as follows:

Year & Semester	Code & Title of the Course
III Year, V Sem	BCTH 0105: Soft Skills - V

Agenda Item – 14.12: To consider and approve courses recommended by Research Cell of the University.

Research Cell of the University has recommended to get the syllabus of Research Methodology and Introduction of One New Course in Ph.D Programme approved in Board of Studies Meeting of the department, same was presented in front of the board. After due discussions board approved the same.

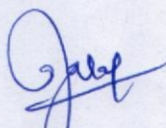
Agenda Item – 14.13: To consider and approve modification in one course and to introduce one new course in PhD Programme, as recommended by the Research Cell of the University.

Research Cell of the University recommended modification in the Syllabus of "Research Methodology" Course as well as recommended to introduce "Research and Publication Ethics" course in PhD Programme from the Session 2020-21. Syllabi of both the courses were duly considered by the board and subsequently approved. The details enclosed in Annexure I.

Agenda Item – 14.14: Any other item with the permission of chair.

No item has been reported.

The meeting ended with thanks to the Chair.



(A.S. Jalal)
Head, CEA

Copy to: Chairman, Academic Council, Registrar, All the members of BoS

ANNEXURE-H



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List of New Courses Introduced

Session: 2020-21

Department: Computer Engineering and Applications

S.No.	Name of the Courses
1	Cryptography and Network Security
2	Cryptography and Network Security Lab
3	Software Quality Engineering
4	Service Oriented Architecture
5	Agile Software Development
6	Digital Image Processing
7	Soft Computing
8	Digital Image Processing Lab
9	Soft Computing Lab
10	Advanced Concepts in Database Systems
11	Data Mining and Warehousing
12	Business Intelligence
13	Information Retrieval System
14	Distributed and Parallel Databases
15	Natural Language Processing
16	Big Data Analytics
17	Data Mining and Warehousing Lab
18	Business Intelligence Lab
19	Big Data Analytics Lab
20	Business Intelligence Project
21	Big Data Analytics Project
22	Advanced Computer Architecture
23	Embedded System
24	Distributed System
25	Embedded System Lab
26	Project – Part I
27	Project – Part II
28	Applied Database Management System
29	Applied Data Structures and Algorithms
30	Applied Database Management System Lab
31	Applied Data Structures and Algorithms Lab
32	Cloud and Business Process Management
33	Cloud Security, Backup & Disaster Recovery
34	Container Orchestration and Infrastructure Automation
35	Devops
36	Cloud and Business Process Management Lab
37	Cloud Security, Backup & Disaster Recovery Lab

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List of New Courses Introduced

Session: 2020-21

Department: Computer Engineering and Applications

S.No.	Name of the Courses
38	Container Orchestration and Infrastructure Automation Lab
39	DevOps Lab
40	Descriptive Analytics for IoT
41	Ipv6 Analysis and Applications
42	Descriptive Analytics for IoT Lab
43	Big Data Analytics
44	IoT for Industries
45	Designer of Smarter Cities
46	Big Data Analytics Lab
47	Introduction to Machine Learning
48	Algorithm for Intelligent Systems and Robotics
49	Introduction to IoT
50	IIOT Communication & Interface
51	Web Technology
52	Web Technology Lab
53	Mini Project – II
54	Major Project
55	Advanced Database Management System
56	Enterprise Resource Planning
57	Software Project Management
58	Management Information System and E commerce
59	Digital Marketing & Transformation
60	Advanced Database Management System Lab
61	Digital Marketing & Transformation Lab
62	Introduction to Artificial Intelligence
63	Software Testing
64	Cyber Security
65	Data Mining & Warehousing
66	Design and Analysis of Algorithms
67	Programming in Advanced Java
68	Introduction to Distributed System
69	Introduction to Cloud Computing
70	Introduction to Big Data
71	Introduction to Internet of Things
72	.Net Framework using VB.Net
73	Advanced Java Lab
74	Introduction to Big Data Lab

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List of New Courses Introduced

Session: 2020-21

Department: Computer Engineering and Applications

S.No.	Name of the Courses
75	VB.Net Programming Lab
76	Soft Skills -V
77	Research and Publication Ethics

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