Minutes of 14th Board of Studies Meeting of Computer Science and Engineering Department Held on

20th September, 2021 (Monday)

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Committee Room, Guru Nanak Dev Engineering College, Gill Road, Ludhiana (Pb.) – 141006

An Autonomous College under UGC Act 1956 [2(f) and 12(B)]

Department of Computer Science & Engineering

Ret. No.: 5-38/1569

Dated: 23/9/2021

Minutes of 14th meeting of Board of Studies of Computer Science and Engineering Department held on 20.09,2021 at 11:00 am in the Committee Room, GNDEC, Ludhiana.

The following persons were present:

- 1. Dr. Parminder Singh, Professor & Head, Department of Computer Science and Engineering, GNDEC, Ludhiana (Chairman)
- 2. Prof. Amanpreet Singh Brar, Associate Professor, Department of Computer Science and Engineering, GNDEC, Ludhiana (Member)
- 3. Dr. Amandeep Kaur Sohal, Assistant Professor, Department of Computer Science and Engineering, GNDEC, Ludhiana (Member)
- 4. Dr. Sumeet Kaur Sehra, Assistant Professor, Department of Computer Science and Engineering, GNDEC, Ludhiana (Member)
- 5. Dr. Vivek Thapar, Assistant Professor, Department of Computer Science and Engineering, GNDEC, Ludhiana (Member)
- 6. Dr. Gurpreet Singh Lehal, Professor, Department of Computer Science, Punjabi University, Patiala (Outside Expert)
- 7. Dr. Sukhwinder Singh, Professor, UIET, Panjab University, Chandigarh (Outside Expert)
- 8. Dr. Balwinder Sodhi, Department of CSE, IIT, Ropar (IKGPTU Nominee)
- 9. Mr. Rinku Garg, Senior Technical Lead, Fidelity Information Services India Pvt. Ltd., Chandigarh (Industry Expert)
- 10. Mr. Amit Mathur, Rohe and Schwarz India Pvt. Ltd., Delhi (Industry Expert)
- 11. Ms. Sukhdeep Kaur, Senior Software Engineer, Vserv Business Solutions Pvt. Ltd., Mohali (Postgraduate Alumni)
- 12. Dr. Pankaj Bhambri, Nominee Dean (Academic) (Member)
- 13. Dr. Jagdeep Singh, Nominee Controller of Examination (Member)
- 14. Er. Kapil Sharma, Nominee Training and Placement Officer (Member)
- 15. Ms. Ramneet Kaur Sekhon, B.Tech. (Second Year), Roll No. 2004647 (Member)
- 16. Ms. Gurleen, B.Tech. (Third Year), Roll No. 1904995 (Member)
- 17. Ms. Palak, B.Tech. (Fourth Year), Roll No. 1805207 (Member)
- 18. Ms. Kamalpreet Kaur, M.Tech., Roll No. 2005150 (Member)

The meeting started with welcome address by chairman BOS, and the already circulated agenda was put up for discussion. Following decisions were taken unanimously:

Agenda Item 1

To discuss and finalise the syllabus of 7th and 8th semesters of B.Tech. Computer Science and Engineering study scheme 2018.

Approved

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The following suggestions were made during discussion about syllabi of different subjects:

		g discussion about syllabil of different subjects.
	Subject Name with Code	Suggestions
	Agile Software Development (PECS-103)	• Numerical content and role play activities should be incorporated in the syllabus.
		• Students should be encouraged to do certification in agile software development.
	Object Oriented Design using UML (PECS-104)	Case studies section should be updated.
	Software Metrics (PECS-105)	Case study section should be incorporated in Software Metrics subject.
	Object Oriented Design using UML Laboratory (LPECS-102)	Syllabus should be made more problem based.
	Component Based Development Laboratory (LPECS-103)	Latest tools used in component based development should be added to the syllabus.
		Course outcomes need to be revised.
	Wireless Sensor Networks (PECS-110)	Case studies should be incorporated.
	Blockchain Technology (PECS-111)	Percentage of numerical content should be included in Block chain technology.
		The syllabus should be focused on one technology either Ethereum or Hyperledger.
	Internet of Things (PECS-112)	The syllabus content should be reduced
	Wireless Sensor Networks Laboratory (LPECS-105)	The syllabus should be updated with more problem based practicals.
	Internet of Things Laboratory (LPECS-106)	Cloud computing and Analytics should be considered in the syllabus.
	Data Warehouse and Data Mining (PECS-115)	Dashboard and data representation topic should be incorporated.
		Data mining techniques should be divided into subsections.
	Cloud Computing (PECS-116)	Cloud computing platform section should be reduced.
	Big Data (PECS-117)	Business analytics section should be divided into two sections.
	Data Science (PECS-118)	 ROC curve topic should be included in data visualization section and this section should be subdivided into two sections.
		• Percentage of numerical content should be made 30%.

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cience Laboratory (LPECS-109)	• Introduction to the datasets must be part of the syllabus.
	The syllabus should be updated using case studies.
omputer Vision (PECS-121)	The syllabus should be updated to include more topics on computer vision, rather than deep learning for Computer vision.
Soft Computing (PECS-122)	Last section should be renamed as Nature inspired algorithms.
	• Latest algorithms including firefly, Cuckoo search may be added.
Human Computer Interaction (PECS-123)	Content should be specific in speech recognition and translation topic.
	The text books should be updated.
Deep Learning (PECS-124)	Sequencing of topics should be checked.
	Syllabus of MIT and course era may be referred for the updates.
Soft Computing Laboratory (LPECS-111)	Lab should be made application based.
Deep Learning Laboratory (LPECS-112)	Lab should be made application oriented.
Web Technologies (PECS-128)	Search engine optimization section should be made application oriented.
	Web application security may be added.
Parallel and Distributed Algorithms	No. of hours should be checked.
(PECS-129)	Last section of synchronization should be subdivided.
Mobile Application Development	IoS topic should be included,
(PECS-130)	Cross platform application development should be discussed in the syllabus.
Web Technologies Laboratory (LPECS-114)	The application developed must be compatible with mobile devices.
	Government guidelines must be followed for website and mobile application development.
Mobile Application Development Laboratory (LPECS-115)	Student should develop mobile app pertaining to practical aspect.
Software Management Tools (PRCS-107)	Harvest, Jenkins and other latest tools should be added.

Others general suggestions:

1. Credit transfer of courses should be think of in case student goes through online course. In this context Institute should develop a policy.

- In video lectures course name should be incorporated along with hyperlink.
- 3. Acronyms used in syllabus of should be expanded.

Agenda Item 2

Amendment in list of open elective subjects in study scheme 2018 of B.Tech. Computer Science and Engineering.

Approved

Agenda Item 3

To discuss and finalise the syllabus of open elective subjects in study scheme 2018 of B.Tech. Computer Science and Engineering.

Approved

The following suggestions were made:

Subject Name with Code	Suggestions
Business Information System (OECS-106)	 Section enterprise and functional business system should be updated.
Soft Computing (OECS-108)	• Last section should be renamed as Nature inspired algorithms.
Real Time Systems (OECS-110)	• Section Operating System should be renamed as Real Time operating system.
Multimedia Systems (OECS-111)	Storage media section should be updated.

Agenda Item 4

Discussion about subjects to be offered through MOOCs for honour degree.

Approved

Agenda Item 5

Discussion about subjects to be offered through MOOC for minor degree in Computer Science and Engineering.

Approved

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<u> genda Item 6</u> To discuss and finalise the updated Program Educational Objectives and Program Outcomes of B.Tech. Computer Science and Engineering.

Approved

Agenda Item 7

To discuss and finalise the updated Program Educational Objectives and Program Outcomes of M.Tech. Computer Science and Engineering.

Approved

Agenda Item 8

Approval of panel of external question paper setters for end semester examinations of B.Tech and M.Tech.

Approved