

**Guru Nanak Dev Engineering College, Ludhiana**  
**Department of Computer Science & Engineering**

Ref. No.:.....(CSE/03).

Dated:.....9-6-15

Minutes of 4<sup>th</sup> meeting of Board of Studies of Computer Science and Engineering department held on 08.06.2015 at 11:00 am in the college committee room.

The following persons were present:

1. Dr. Parminder Singh, Associate Professor & Head, Department of Computer Science and Engineering, GNDEC, Ludhiana (Chairman)
2. Er. Amanpreet Singh Brar, Associate Professor, Department of Computer Science and Engineering, GNDEC, Ludhiana (Member)
3. Er. Sumeet Kaur Sehra, Assistant Professor, Department of Computer Science and Engineering, GNDEC, Ludhiana (Member)
4. Er. Vivek Thapar, Assistant Professor, Department of Computer Science and Engineering, GNDEC, Ludhiana (Member)
5. Dr. Gurpreet Singh Lehal, Professor, Department of Computer Science, Punjabi University, Patiala (Member)
6. Dr. Sukhwinder Singh, Professor, UIET, Panjab University Chandigarh (Member)
7. Dr. Paramjit Singh, Associate Professor, Giani Zail Singh Punjab Technical University Campus, Bathinda (Member)
8. Er. Nitish Mahajan, MD, Conjoinix Technology Private Limited, Sector 34-A, Chandigarh (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:

**Proceedings:**

**Agenda Item 1**

**1.1 Finalizing the new scheme for B.Tech. Computer Science and Engineering**

**Approved**

After discussion and deliberation, necessary modifications have been incorporated in the proposed scheme of B.Tech. Computer Science and Engineering.

Committee approved the scheme and authorized Chairman BOS for further changes if required.

Dr. Parminder Singh

Er. Amanpreet Singh Brar

Er. Sumeet Kaur Sehra

Er. Vivek Thapar

Dr. Gurpreet Singh Lehal

Dr. Sukhwinder Singh

Dr. Paramjit Singh

Er. Nitish Mahajan

### THIRD SEMESTER

Course Code	Course Name	Load Allocation			Marks Distribution		Total Marks	Credits
		L	T	P	Internal	External		
BTAM-301	Mathematics-III	3	1	-	40	60	100	4
BTCSE-301	Computer Architecture and Organisation	3	1	-	40	60	100	4
BTCSE-302	Digital Circuits and Logic Design	3	1	-	40	60	100	4
BTCSE-303	Data Structures and Algorithms	4	1	-	40	60	100	5
BTCSE-304	Object Oriented Programming using C++	4	1	-	40	60	100	5
BTCSE-305	Digital Circuits and Logic Design Lab	-	-	2	30	20	50	1
BTCSE-306	Data Structures and Algorithms Lab	-	-	4	30	20	50	2
BTCSE-307	Object Oriented Programming using C++ Lab	-	-	4	30	20	50	2
BTCSE-308	Institutional Practical Training*				60	40	100	1
<b>Total</b>		<b>17</b>	<b>5</b>	<b>10</b>	<b>350</b>	<b>400</b>	<b>750</b>	<b>28</b>
		<b>Contact Hours= 32</b>						

\*Institutional training will be imparted at the end of 2<sup>nd</sup> semester in the institute for four weeks

Dr. Parminder Singh

Er. Amanpreet Singh Brar

Er. Sumeet Kaur Sehra

Er. Vivek Thapar

Dr. Gurpreet Singh Lehal

Dr. Sukhwinder Singh

Dr. Paramjit Singh

Er. Nitish Mahajan

## FOURTH SEMESTER

Course Code	Course Name	Load Allocation			Marks Distribution		Total Marks	Credits
		L	T	P	Internal	External		
BTCSE-401	Discrete Structures	3	1	-	40	60	100	4
BTCSE-402	Operating System	3	1	-	40	60	100	4
BTCSE-403	Computer Networks	3	1	-	40	60	100	4
BTCSE-404	Microprocessor Architecture and Programming	3	1	-	40	60	100	4
BTCSE-405	Java Programming	4	1	-	40	60	100	5
BTCSE-406	Operating Systems Lab	-	-	2	30	20	50	1
BTCSE-407	Computer Networks Lab	-	-	4	30	20	50	2
BTCSE-408	Microprocessor Architecture and Programming Lab	-	-	2	30	20	50	1
BTCSE-409	Java Programming Lab	-	-	4	30	20	50	2
<b>General Fitness</b>					100	-	100	-
<b>Total</b>		<b>16</b>	<b>5</b>	<b>12</b>	<b>420</b>	<b>380</b>	<b>800</b>	<b>27</b>
		<b>Contact Hours= 33</b>						

Dr. Parminder Singh

Er. Amanpreet Singh Brar

Er. Sumeet Kaur Sehra

Er. Vivek Thapar

Dr. Gurpreet Singh Lehal

Dr. Sukhwinder Singh

Dr. Paramjit Singh

Er. Nitish Mahajan

## FIFTH SEMESTER

Course Code	Course Name	Load Allocation			Marks Distribution		Total Marks	Credits
		L	T	P	Internal	External		
BTCSE-501	Relational Database Management System	3	1	-	40	60	100	4
BTCSE-502	Computer Graphics	3	1	-	40	60	100	4
BTCSE-503	Design and Analysis of Algorithms	3	1	-	40	60	100	4
BTCSE-504	Web Technologies	3	1	-	40	60	100	4
BTCSE-505	Cyber Laws and IPR	3	1	-	40	60	100	4
BTCSE-506	Relational Database Management System Lab	-	-	4	30	20	50	2
BTCSE-507	Computer Graphics Lab	-	-	2	30	20	50	1
BTCSE-508	Design and Analysis of Algorithms Lab	-	-	2	30	20	50	1
BTCSE-509	Web Technologies Lab	-	-	4	30	20	50	2
BTCSE-510	Industrial Training				60	40	100	2
Total		15	5	12	380	420	800	28
		Contact Hours= 32						

Dr. Parminder Singh

Er. Amanpreet Singh Brar

Er. Sumeet Kaur Sehra

Er. Vivek Thapar



Dr. Gurpreet Singh Lehal




Dr. Sukhwinder Singh


Dr. Paramjit Singh

Er. Nitish Mahajan

SIXTH SEMESTER								
Course Code	Course Name	Load Allocation			Marks Distribution		Total Marks	Credits
		L	T	P	Internal	External		
BTCSE-601	Theory of Computation	3	1	-	40	60	100	4
BTCSE-602	Advanced Database Systems	4	1	-	40	60	100	5
BTCSE-603	Software Engineering	3	1	-	40	60	100	4
BTCSE-xxx	Elective-I	3	1	-	40	60	100	4
BTCSE-xxx	Elective-II	3	1	-	40	60	100	4
BTCSE-604	Advanced Database Systems Lab	-	-	4	30	20	50	2
BTCSE-605	Software Engineering Lab	-	-	4	30	20	50	2
BTCSE-xxx	Elective-I Lab	-	-	4	30	20	50	2
General Fitness					100	-	100	
Total		16	5	12	390	360	750	27
		Contact Hours= 33						

Dr. Parminder Singh   
 Er. Amanpreet Singh Brar   
 Er. Sumeet Kaur Sehra

Er. Vivek Thapar   
 Dr. Gurpreet Singh Lehal   
 Dr. Sukhwinder Singh 

Dr. Paramjit Singh   
 Er. Nitish Mahajan

## SEVENTH/EIGHTH SEMESTER

Course Code	Course Name	Load Allocation			Marks Distribution		Total Marks	Credits
		L	T	P	Internal	External		
BTCSE-701	Advanced Computer Networks	3	1	-	40	60	100	4
BTCSE-702	Compiler Design	3	1	-	40	60	100	4
BTCSE-xxx	Elective-III	3	1	-	40	60	100	4
BTCSE-xxx	Elective-IV	3	1	-	40	60	100	4
BTCSE-xxx	Open Elective	3	-	-	40	60	100	3
BTCSE-703	Advanced Computer Networks Lab	-	-	2	30	20	50	1
BTCSE-704	Project	-	-	10	100	100	200	5
<b>General Fitness</b>					100	-	100	
<b>Total</b>		<b>15</b>	<b>4</b>	<b>12</b>	<b>430</b>	<b>420</b>	<b>850</b>	<b>25</b>
		<b>Contact Hours= 31</b>						

## SEVENTH/EIGHTH SEMESTER

Course Code	Course Name	Load Allocation			Marks Distribution		Total Marks	Credits
		L	T	P	Internal	External		
BTCSE-801	Industrial Training	-	-	-	450	300	750	20

Dr. Parminder Singh

Er. Amanpreet Singh Brar

Er. Sumeet Kaur Sehra

Er. Vivek Thapar

Dr. Gurpreet Singh Lehal

Dr. Sukhwinder Singh

Dr. Paramjit Singh

Er. Nitish Mahajan

## 1.2 Finalizing the elective subjects for new scheme for B.Tech. Computer Science and Engineering

### Approved

#### Elective-I:

BTCSE-606 Simulation and Modeling  
BTCSE-607 Digital Image Processing  
BTCSE-608 Artificial Intelligence  
BTCSE-609 Advanced Java  
BTCSE-610 .NET Technologies  
BTCSE-611 Linux Administration  
BTCSE-612 Simulation and Modeling Lab  
BTCSE-613 Digital Image Processing Lab  
BTCSE-614 Artificial Intelligence Lab  
BTCSE-615 Advanced Java Lab  
BTCSE-616 .NET Technologies Lab  
BTCSE-617 Linux Administration Lab

#### Elective-II:

BTCSE-618 Advanced Computer Architecture  
BTCSE-619 Cryptography and Network Security  
BTCSE-620 Wireless Networks  
BTCSE-621 Ethical Hacking  
BTCSE-622 Network Protocols  
BTCSE-623 Embedded Systems

#### Elective-III:

BTCSE-705 Parallel Computing  
BTCSE-706 Mobile Computing  
BTCSE-707 Cloud Computing  
BTCSE-709 Big Data and Business Analytics  
BTCSE-710 Data Warehouse and Data Mining

Dr. Parminder Singh

Er. Amanpreet Singh Brar

Er. Sumeet Kaur Sehra

Er. Vivek Thapar

Dr. Gurpreet Singh Lehal

Dr. Sukhwinder Singh

Dr. Paramjit Singh

Er. Nitish Mahajan

**Elective-IV:**

- BTCSE-711 Natural Language Processing
- BTCSE-712 Machine Learning
- BTCSE-713 Software Testing and Quality Assurance
- BTCSE-714 Information Security
- BTCSE-715 Soft Computing
- BTCSE-716 Agile Software Development

**Open Electives:**

- BTCSE-717 Operation Research
- BTCSE-718 Engineering Economics and Management
- BTCSE-719 Organizational Structures
- BTCSE-720 Project management
- BTCSE-721 Optimization Techniques
- BTCSE-722 Human Resource Management
- BTCSE-723 Industrial Psychology

---

Dr. Parminder Singh

Er. Amanpreet Singh Brar

Er. Sumeet Kaur Sehra

Er. Vivek Thapar

Dr. Gurpreet Singh Lehal

Dr. Sukhwinder Singh

Dr. Paramjit Singh

Er. Nitish Mahajan



**1.3 Finalizing the syllabus of subjects of 3<sup>rd</sup> and 4<sup>th</sup> semester of B.Tech. Computer Science and Engineering new scheme.**

**Approved**

After discussion and deliberation, certain modifications have been done and others recommendations will be incorporated in the proposed Syllabi of subjects of B.Tech. Computer Science and Engineering.

Committee approved the syllabus and authorized Chairman BOS for further changes if required.

<b>THIRD SEMESTER</b>		
<b>Course Code</b>	<b>Course Name</b>	<b>Suggestions</b>
BTAM-301	Mathematics-III	<ul style="list-style-type: none"> <li>No. of hours to be revised.</li> </ul>
BTCSE-301	Computer Architecture and Organisation	<ul style="list-style-type: none"> <li>No. of hours for control unit to be revised.</li> <li>Data representation chapter should be revised.</li> </ul>
BTCSE-302	Digital Circuits and Logic Design	<ul style="list-style-type: none"> <li>Book of Anant Kumar has to be added</li> <li>Family class topic</li> </ul>
BTCSE-303	Data Structures and Algorithms	<ul style="list-style-type: none"> <li>No. of Lectures per unit to be revised.</li> </ul>
BTCSE-304	Object Oriented Programming using C++	<ul style="list-style-type: none"> <li>No. of Lectures per unit to be revised.</li> </ul>
BTCSE-305	Digital Circuits and Logic Design Lab	-----
BTCSE-306	Data Structures and Algorithms Lab	<ul style="list-style-type: none"> <li>Data structure lab programs should be application oriented</li> <li>Sorting and searching programs should be included in as single program and compare these algorithms on different types of inputs.</li> </ul>
BTCSE-307	Object Oriented Programming using C++ Lab	-----
BTCSE-308	Institutional Practical Training*	Institutional practical training should be diversify by including some vocational courses.

Dr. Parminder Singh

Er. Amanpreet Singh Brar

Er. Sumeet Kaur Sehra

Er. VivekThapar

Dr. Gurpreet Singh Lehal

Dr. Sukhwinder Singh

Dr. Paramjit Singh

Er. Nitish Mahajan

## FOURTH SEMESTER

Course Code	Course Name	Suggestions
BTCSE-401	Discrete Structures	<ul style="list-style-type: none"><li>• Book of C.L. Liu to be included</li><li>• Kruskal's algorithm (minimum spanning tree)</li></ul>
BTCSE-402	Operating System	<ul style="list-style-type: none"><li>• Book of Godbole to be included</li></ul>
BTCSE-403	Computer Networks	<ul style="list-style-type: none"><li>• Lecture distribution should be included</li></ul>
BTCSE-404	Microprocessor Architecture and Programming	<ul style="list-style-type: none"><li>• Chapter of microcontroller to be removed.</li><li>• Chapter on interfacing applications should be included</li><li>• Book of A.P. Mathur and Sridhar and B. Ram to be included.</li></ul>
BTCSE-405	Java Programming	-----
BTCSE-406	Operating Systems Lab	<ul style="list-style-type: none"><li>• Syllabus should be revised according to 2 Hr lab and focus should be on shell programming.</li></ul>
BTCSE-407	Computer Networks Lab	<ul style="list-style-type: none"><li>• Configuration of DHCP</li><li>• Proxy settings</li></ul>
BTCSE-408	Microprocessor Architecture and Programming Lab	<ul style="list-style-type: none"><li>• Syllabus should be revised by removing microcontroller practicals and including interfacing applications.</li></ul>
BTCSE-409	Java Programming Lab	-----

Dr. Parminder Singh

Er. Amanpreet Singh Brar

Er. Sumeet Kaur Sehra

Er. Vivek Thapar

Dr. Gurpreet Singh Lehal

Dr. Sukhwinder Singh

Dr. Paramjit Singh

Er. Nitish Mahajan

## Agenda Item 2

Approval of syllabus of subjects for new scheme of M.Tech. Computer Science and Engineering, after incorporation of suggestions given in 3<sup>rd</sup> BOS meeting held on 6<sup>th</sup> Feb., 2015.

Approved

## Agenda Item 3

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

Approved

### General Suggestions:

- Internal evaluation of project work will include a seminar that is to be presented by each student.
- Project evaluation should be carried out by the industry expert and preferably one expert for about 10 students.
- To enhance industry institute interaction, regular expert talks should be carried by the experts from industry.
- Some provision should be made at institute level to include non credit course for teaching certain foreign languages.

---

Dr. Parminder Singh

Er. Amanpreet Singh Brar

Er. Sumeet Kaur Sehra

Er. Vivek Thapar

Dr. Gurpreet Singh Lehal

Dr. Sukhwinder Singh

Dr. Paramjit Singh

Er. Nitish Mahajan