

# Post Graduate Department of Computer Sciences

## University of Kashmir, Srinagar-190006

### Notes

#### Minutes of the BOS meeting held on 10-11-2018 at 11:30 AM

A Board of Studies (BOS) meeting was held on November 10, 2018 at 11:30 AM under the chairmanship of the Head of the Department of Computer Science and following were present.

- |                                   |                      |
|-----------------------------------|----------------------|
| 1. Prof. M. Arif Wani ...in chair | HOD Computer Science |
| 2. Dr. Javed Parvez               | Faculty, Main Campus |
| 3. Dr. Manzoor Chachoo            | Faculty, Main Campus |
| 4. Dr. Muheet Butt                | Faculty Main Campus  |
| 5. Dr. Javaid Iqbal               | Faculty Main Campus  |
| 6. Dr. Rana Hashmy                | Faculty Main Campus  |
| 7. Dr. Sajad M Khan               | Faculty Main Campus  |
| 8. Dr. Wasim Bhat                 | Faculty North Campus |
| 9. Dr. Fasel Qadir                | Faculty North Campus |
| 10. Dr. Umar Farooq               | Faculty North Campus |
| 11. Dr. Faheem Masoodi            | Faculty Main Campus  |
| 12. Dr. Sajid Yousuf Bhat         | Faculty Main Campus  |
| 13. Mr. Abid Wani                 | Faculty South Campus |
| 14. Mr. Mohsin Altaf Wani         | Faculty South Campus |
| 15. Mr. Hilal Khanday             | Faculty South Campus |
| 16. Mr. Mudasir                   | Faculty South Campus |

At the outset the HOD, Department of Computer Sciences welcomed all the members. The following agenda was put on the table:

1. Course Structure of MCA in light of changes made to CBCS by the University
2. Course Structure of MTech in light of changes made to CBCS by the University

#### ITEM I

Regarding the marks distribution of MCA and MTech programmes, it was resolved that the department will adopt the university policy of having 20% marks for internal assessment and 80% marks for end semester assessment. This change will be effective from this semester for all batches.

#### ITEM II

The members discussed threadbare the course structure of MCA degree programme and the following was resolved.

1. In view of the requirement that the number of total core credits units for the MCA programme are to be increased by eight credits units, the members resolved that two credit courses be added to the core component of each of the first four semesters for MCA batch 2018 and onwards.
2. As per new requirement only 8 credit units need to be covered for GE/OE instead of 16 credit units. This requires number of OE & GE courses for the first four semesters to be reduced to only one GE course per semester only.
3. Based on the above decisions, a new course structure and syllabus of MCA degree programme was drafted and approved. The new course structure will be applicable to students of 2018 batch and onwards.

#### ITEM III

The following two new subjects were added:


- a. Multimedia Systems (two credit units) added to core component of MCA 4<sup>th</sup> semester
- b. Wireless and Mobile Computing (four credit units) added to DCE component of MCA 5<sup>th</sup> semester

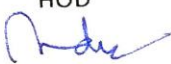
#### ITEM IV

The following three elective subjects were added to M. Tech. degree programme:

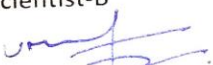
1. Embedded Systems (four credit units) for 1<sup>st</sup> semester
2. Software Reliability Engineering (four credit units) for 2<sup>nd</sup> semester
3. Network Security (four credit units) for 3<sup>rd</sup> semester

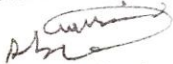
Meeting ended with vote of thanks to the chair.

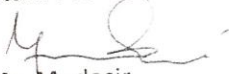
  
Prof. M. Arif Wani  
HOD


  
Dr. Muheet Butt  
Scientist-D

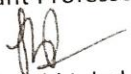
  
Dr. Sajad M Khan  
Scientist-B

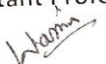
  
Dr. Umar Farooq  
Assistant Professor


  
Mr. Abid Wani  
Assistant Professor


  
Mr. Mudasir  
Assistant Professor

  
Dr. Javed Parvez  
Assistant Professor

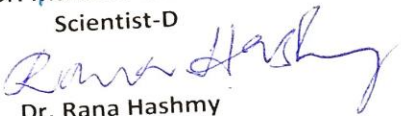
  
Dr. Javaid Iqbal  
Assistant Professor


  
Dr. Wasim Bhat  
Assistant Professor

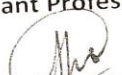
  
Dr. Faheem Masoodi  
Assistant Professor

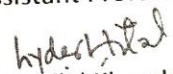
  
Mr. Mohsin Altaf Wani  
Assistant Professor

  
Dr. Manzoor Chachoo  
Scientist-D

  
Dr. Rana Hashmy  
Scientist-C

  
Dr. Fasel Qadir  
Assistant Professor

  
Dr. Sajid Yousuf Bhat  
Assistant Professor

  
Mr. Hilal Khanday  
Assistant Professor



Post Graduate Department of Computer Sciences,  
The University of Kashmir,  
Srinagar - 190006



Curriculum and Evaluation Scheme for  
Master of Technology in  
Computer Science

*[Handwritten signature]*

*A.I*

*10/11*  
*10/Nov/2018*

*Shahid*

*[Handwritten signature]*

2018 – 2020

*Hydrotex*

*[Handwritten signature]*

*[Handwritten signature]*

*Wamh*

*[Handwritten signature]*

*[Handwritten signature]*



### Structure of Curriculum for M. Tech. in Computer Science

Semester-I (24 Credit unit Semester)						
Course Code	Course name	Category	Hours / Week			Credits
			L	T	P	
<b>CORE SUBJECTS</b>						
CSE511	Database Management Systems	Core	4	0	0	4
CSE512	Lab Database Management Systems	Core	0	0	4	2
CSE513	Data Structures using C++	Core	4	0	0	4
CSE514	Lab Data Structures using C++	Core	0	0	4	2
CSE515	Artificial Intelligence	Core	4	0	0	4
<b>ELECTIVE SUBJECTS</b>						
CSE516x	Elective 1	Elective	4	0	0	4
CSE516x	Elective 2	Elective	4	0	0	4

**List of Elective Subjects:**

- i) CSE5161 Data Communications
- ii) CSE5162 Embedded Systems
- iii) CSE5163 Engineering Mathematics

*[Handwritten signatures and notes in blue ink:]*

*P*  
*10/11*

*hydrolysis*

*phosphorus*

*iron*

*Schard*

*Chlorine*

*Silver*

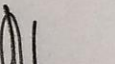
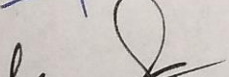
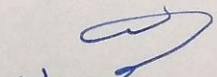



M. Tech. Syllabus –P.G. Dept. of Computer Science, University of Kashmir

Semester-II (24 Credit unit Semester)						
Course Code	Course name	Category	Hours / Week			Credits
			L	T	P	
<b>CORE SUBJECTS</b>						
CSE521	Network Protocols and Security	Core	4	0	0	4
CSE522	Lab Network Protocols and Security	Core	0	0	4	2
CSE523	Image Processing	Core	4	0	0	4
CSE524	Lab Image processing	Core	0	0	4	2
CSE525	Machine Learning	Core	4	0	0	4
<b>ELECTIVE SUBJECTS</b>						
CSE526x	Elective 1	Elective	4	0	0	4
CSE526x	Elective 2	Elective	4	0	0	4

**List of Elective Subjects:**

- iv) CSE5261 Algorithms and Complexity
- v) CSE5262 Software Reliability Engineering
- vi) CSE5263 Optimization Techniques

  
 Ep by hydrolysis  
by    Spencer  
Chrest by Inde



M. Tech. Syllabus –P.G. Dept. of Computer Science, University of Kashmir

Semester-III (24 Credit unit Semester)						
Course Code	Course name	Category	Hours / Week			Credits
			L	T	P	
CORE SUBJECTS						
CSE531	Minor Project	Core	0	4	0	4
CSE532	Parallel and Distributed Algorithms	Core	4	0	0	4
CSE533	Real Time Operating Systems	Core	4	0	0	4
CSE534	Wireless and Mobile Computing	Core	4	0	0	4
ELECTIVE SUBJECTS						
CSE535x	Elective 1	Elective	4	0	0	4
CSE535x	Elective 2	Elective	4	0	0	4

List of Elective Subjects:

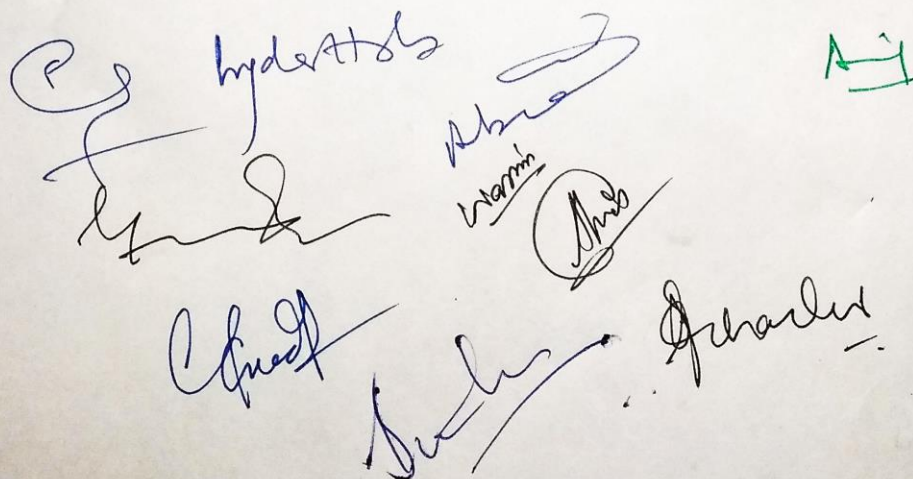
- i) CSE5351 Cloud Computing
- ii) CSE5352 Network Security
- iii) CSE5353 Natural Language Processing

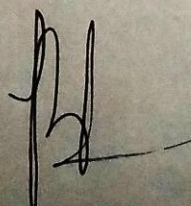
*[Handwritten signatures and initials in blue and green ink]*

*[Handwritten signature in black ink]*



Semester-IV(24 Credit unit Semester)						
Course Code	Course name	Category	Hours / Week			Credits
			L	T	P	
CORE SUBJECTS						
CSE541	Major Project Problem Identification	Core	0	2	0	2
CSE542	Major Project Problem Analysis	Core	0	4	0	4
CSE543	Major Project Software Development	Core	0	6	0	6
CSE544	Major Project Research Component	Core	0	6	0	6
CSE545	Major Project Dissertation	Core	0	6	0	6


  
 The section contains several handwritten signatures and initials in blue ink, including a large signature on the left, a signature with 'Hyder' written above it, a signature with 'Wahid' written below it, and a signature with 'Ghazal' written below it. There are also some initials and a green signature on the right.


  
 A single handwritten signature in blue ink at the bottom left of the page.



Post Graduate Department of Computer Sciences,  
The University of Kashmir,  
Srinagar - 190006



## Choice Based Credit System Curriculum for

Master of Computer Applications  
(MCA) Programme  
2018 – 2020

*[Handwritten signatures and notes:]*

- P* / 10/11
- An y* / 10/Nov/18.
- Hydroxyl*
- Alfred*
- Worm*
- unw*
- Rick*
- Schmidt*
- Dick*
- Aug*



# MCA Syllabus –P.G. Dept. of Computer Science, University of Kashmir

Semester-I (24 Credit unit Semester)						
Subject Code	Subject name	Subject Category	Hours / Week			Credits
			L	T	P	
14 Core Credit Units						
MCA18101CR	Programming in C++	Core	3	1	0	4
MCA18102CR	Database Systems	Core	3	1	0	4
MCA18103CR	C++ Lab	Core	0	0	4	2
MCA18104CR	Database Systems Lab	Core	0	0	4	2
MCA18001CR	Technical Communication	Core	2	0	0	2
8 Discipline Centric Elective Credit Units						
MCA18105DCE	Assembly Language Programming	DCE	3	0	2	4
MCA18106DCE	Discrete Mathematics	DCE	3	1	0	4
MCA18107DCE	Computer Architecture	DCE	3	0	2	4
2 Generic/Open Elective Credit Units for MCA and 10 non-MCA students						
MCA18001GE	Latex	GE	2	0	0	2

Semester-II (24 Credit unit Semester)						
Subject Code	Subject name	Subject Category	Hours / Week			Credits
			L	T	P	
14 Core Credit Units						
MCA18201CR	Data Structures using C++	Core	3	1	0	4
MCA18202CR	Numerical Techniques	Core	3	1	0	4
MCA18203CR	Data Structures in C++ Lab	Core	0	0	4	2
MCA18204CR	Numerical Techniques Lab	Core	0	0	4	2
MCA18002CR	Optimization Techniques	Core	2	0	0	2
8 Discipline Centric Elective Credit Units						
MCA18205DCE	Unix/Linux Programming	DCE	3	0	2	4
MCA18206DCE	Data Communication	DCE	3	0	2	4
MCA18207DCE	Management Information System	DCE	3	1	0	4
2 Generic/Open Elective Credit Units for MCA and 10 non-MCA students						
MCA18002GE	Matlab	GE	2	0	0	2

Semester-III (24 Credit unit Semester)						
Subject Code	Subject name	Subject Category	Hours / Week			Credits
			L	T	P	
14 Core Credit Units						
MCA18301CR	Web Programming	Core	3	1	0	4
MCA18302CR	Design and Analysis of Algorithms	Core	3	1	0	4
MCA18303CR	Web Programming Lab	Core	0	0	4	2
MCA18304CR	Algorithms Lab	Core	0	0	4	2
MCA18003CR	Cloud Computing	Core	2	0	0	2
8 Discipline Centric Elective Credit Units						
MCA18305DCE	Computer Networks	DCE	3	0	2	4
MCA18306DCE	Operating Systems	DCE	3	0	2	4
MCA18307DCE	Software Engineering	DCE	3	1	0	4
2 Generic/Open Elective Credit Units for MCA and 10 non-MCA students						
MCA18003GE	Python	GE	2	0	0	2

To be effective from the year 2018



# MCA Syllabus –P.G. Dept. of Computer Science, University of Kashmir

Semester-IV (24 Credit unit Semester)						
Subject Code	Subject Name	Subject Category	Hours / Week			Credits
			L	T	P	
14 Core Credit Units						
MCA18401CR	Artificial Intelligence	Core	3	1	0	4
MCA18402CR	Computer Graphics	Core	3	1	0	4
MCA18403CR	Artificial Intelligence Lab	Core	0	0	4	2
MCA18404CR	Computer Graphics Lab	Core	0	0	4	2
MCA18004CR	Multimedia Systems	Core	2	0	0	2
8 Discipline Centric Elective Credit Units						
MCA18405DCE	Network Security	DCE	3	0	2	4
MCA18406DCE	Image Processing	DCE	3	0	2	4
MCA18407DCE	Object Oriented Analysis and Design	DCE	3	1	0	4
2 Generic/Open Elective Credit Units for MCA and 10 non-MCA students						
MCA18004GE	Advanced Business Systems	GE	2	0	0	2

Semester-V (24 Credit unit Semester)						
Subject Code	Subject Name	Subject Category	Hours / Week			Credits
			L	T	P	
12 Core Credit Units						
MCA18501CR	Java Programming	Core	3	1	0	4
MCA18502CR	Systems Programming	Core	3	1	0	4
MCA18503CR	Java Programming Lab	Core	0	0	4	2
MCA18504CR	Systems Programming Lab	Core	0	0	4	2
12 Discipline Centric Elective Credit Units						
MCA18505DCE	Machine Learning	DCE	3	0	2	4
MCA18506DCE	Wireless and Mobile Communication	DCE	3	0	2	4
MCA18507DCE	Theory of Computation	DCE	3	1	0	4
MCA18508DCE	Data Warehousing	DCE	3	1	0	4

Semester-VI (24 Credit unit Semester)						
Subject Code	Subject Name	Subject Category	Hours / Week			Credits
			L	T	P	
24 Core Credit Units						
MCA18601CR	Project Problem Identification	Core	0	4	0	4
MCA18602CR	Project Problem Analysis	Core	0	4	0	4
MCA18603CR	Project Dissertation	Core	0	4	0	4
MCA18604CR	Project Software Development	Core	0	12	0	12