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सत्यमेव जयते

अखिल भारतीय तकनीकी शिक्षा परिषद्

(भारत सरकार का एक सांविधिक निकाय)
(मानव संसाधन विकास मंत्रालय, भारत सरकार)
नेल्सन मंडेला मार्ग, वसंत कुंज, नई दिल्ली-110070

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

(A Statutory Body of the Govt. of India)
(Ministry of Human Resource Development, Govt. of India)
Nelson Mandela Marg, Vasant Kunj, New Delhi-110070

F. No. AICTE/AB/MCA/2020-21

03.07.2020

To

All AICTE Approved institutes / Universities

Subject:- Change in the duration of MCA Program from 3 Years to 2 Years w.e.f. 2020-21-reg.

Sir / Madam

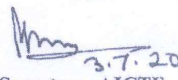
As you may be aware that the issue regarding change in the duration of MCA program from 3 years to 2 years has been engaging the attention of UGC / AICTE for quite some time in the past.

It is informed that the above issue was placed before 545th Meeting of University Grant Commission held on 19.12.2019 and the same has been approved. Hence the MCA course shall be of 2 Years duration from 2020-21.

It is also brought to your notice that the above change in the duration of MCA program from 03 Years to 02 Years has also been incorporated in the AICTE APH 2020-21 and the eligibility qualification is as below:-

“Passed BCA/ Bachelor Degree in Computer Science Engineering or equivalent Degree. OR Passed B.Sc./ B.Com./ B.A. with Mathematics at 10+2 Level or at Graduation Level (with additional bridge Courses as per the norms of the concerned University). Obtained at least 50% marks (45% marks in case of candidates belonging to reserved category) in the qualifying Examination

In view of the above, necessary modification in the course duration of MCA program may please be made in conformity with the UGC decision and provisions contained in AICTE APH for A. Y. 2020-21. A line of confirmation may please be sent to the Council in this regard immediately.


3.7.20
Member Secretary, AICTE



सूचना का
अधिकार



DEPARTMENT OF COMPUTER SCIENCE

ALIGARH MUSLIM UNIVERSITY, ALIGARH 202 002 (U.P), INDIA

Dr. Rafiqul Zaman Khan
Professor & Chairperson

प्रति संख्या/R.No. 2719
दिनांक/Date 06/01/21
प्रवेश अनुभाग/Admissions Section
अलीगढ़ मुस्लिम विश्वविद्यालय
Aligarh Muslim University

University: 0091-571-2700920
Extn.: 3635, 3636
Mobile: 0091-9557104757
Email: chairperson.cs@amu.ac.in
rzk32@yahoo.co.in, rzkhan.cs@amu.ac.in
Webpage: http://www.drrafiq.org

D.No. 2017 /Comp.Sc.

Dated: 06-01-2021

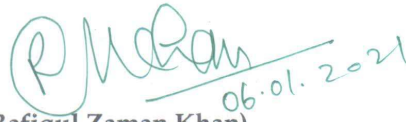
The Controller,
(Examination & Admissions)
A.M.U., Aligarh

Dear Sir,

With reference to your letter D.No. 1985/ Adms., dated 15.12.2020, I am sending required information in the format as desired by you.

Thank you.

With good wishes & best regards,


(Dr. Rafiqul Zaman Khan)
Professor & Chairperson

Attachments:

1. Format of updation of MCA Program.
2. Minutes of Faculty of Science meeting including BoS Minutes.

Mr Mukhtar



Section Officer
(Admissions)
6/01/21

DEPARTMENT OF COMPUTER SCIENCE
ALIGARH MUSLIM UNIVERSITY
ALIGARH-202002
Updation regarding MCA Program

S.No.	Name of Faculty/Department	Page No. of the Guide 2020-2021	Existing Provision 2020-2021	Proposed Changes(s) for 2021-2022
01	Department of Computer Science	J.2	<p>Name: Master in Computer Science & Applications</p> <p>Duration: 03 years (06 Semesters)</p> <p>Eligibility Criteria: B.Tech./B.Arch./ B.E. with 55% marks in aggregate.</p> <p>OR</p> <p>1 Bachelor Degree in Science from a recognized university with 55% marks in aggregate and must have studied Mathematics alongwith any two of the following subjects: Statistics, Physics, Chemistry, Computer Application, Computer Maintenance, Information Technology as main or subsidiary subject at the qualifying examination.</p> <p>2 Must have studied Physics and Mathematics in the Senior Secondary School Certificate or its equivalent course.</p>	<p>Name: Master of Computer Applications</p> <p>Duration: 02 years (04 Semesters)</p> <p>Eligibility Criteria:</p> <p>1. Passed Bachelor Degree in Computer Science / Engineering / Architecture/ Computer Applications/ Information Technology/ Computer Maintenance.</p> <p>OR</p> <p>1. Passed B.Sc./ B.Com/ B.A. or equivalent (a candidate must either produce 'a valid certificate of passing at least two courses of Computer Science with at least 50% marks or equivalent from any Govt-approved mode at 10+2/graduation level' OR 'complete the bridge courses from the Department in the first semester of MCA)</p> <p>2. Must have studied mathematics at 10+2 Level or its equivalent course.</p> <p>3. Obtained at least 50% marks in the qualifying examination.</p>


 06.01.2021
 (Dr. Rafiqul Zaman Khan)
 Professor & Chairperson

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Item No. 7 : To consider the minutes of the Ordinary Meeting of the Faculty of Science held on 19.12.2020.

The ordinary meeting Faculty of Science held on 19.12.2020 made the following recommendations for consideration of the Academic Council.

Item 2

D/o Computer Science BOS Dated 21.10.2020 Item No.2

Approval of new program, M.Sc. in Data Science & Artificial Intelligence to be started in the Department of Computer science from session 2021-22.

Discussion & Decision: The members of the BoS discussed the proposal of M.Sc. in Data Science & Artificial Intelligence and approved the same. (Annexure-B: Proposal of M.Sc. in Data Science & Artificial Intelligence).

D/o Computer Science BOS Dated 21.10.2020 Item No.3

Approval of new program M.Sc. in Cyber Security & Digital Forensics to be started in the Department of Computer science from session 2021-22.

Discussion & Decision: The members of the BoS discussed the proposal of M.Sc. in Cyber Security & Digital Forensics and approved the same (Annexure-C: M.Sc. in Cyber Security & Digital Forensics).

P.T.O.

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D/o Statistics & O.R BOS Dated 24.11.2020 Item No.2

Considered and approved the introduction of M.Sc (Data Science).

Introduction of a new P.G. Programme by the Department of Statistics & O.R. is also approved but to avoid duplicacy it is decided that the programme is renamed as **M.Sc. (Data Analytics)**. The Dean is authorized to forward the M.Sc. (Data Analytics) course structure to the Academic Council after ratification and changes by the B.O.S. of Department of Statistics & O.R.

MATTER FOR CONSIDERATION

To consider the minutes of the Ordinary Meeting of the Faculty of Science held on 19.12.2020.

(Appendix- IV)

OFFICE OF THE DEAN
FACULTY OF SCIENCE
A.M.U., ALIGARH

Dated: 30.12.2020

APPENDIX-IV

ITEM No.- 7

8/11 /F.Sc.

from the ordinary meeting of the Faculty of Science held on 19.12.2020 under the items as per below

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o. 2

Considered, approved and recommended to the Academic Council the Introduction of new Degree/Diploma/etc programme in Faculty of Science.

B.O.S.	Item No.	Item	Decision
Computer Science			
2020	2	Approval of new program, M.Sc. in Data Science & Artificial Intelligence to be started in the Department of Computer science from session 2021-22. Discussion & Decision: The members of the BoS discussed the proposal of M.Sc. in Data Science & Artificial Intelligence and approved the same. (Annexure-B: Proposal of M.Sc. in Data Science & Artificial Intelligence).	Approved
2020	3	Approval of new program M.Sc. in Cyber Security & Digital Forensics to be started in the Department of Computer science from session 2021-22. Discussion & Decision: The members of the BoS discussed the proposal of M.Sc. in Cyber Security & Digital Forensics and approved the same (Annexure-C: M.Sc. in Cyber Security & Digital Forensics).	Approved
Statistics & O.R.			
2020	2	Considered and approved the introduction of M.Sc (Data Science). Introduction of a new P.G. Programme by the Department of Statistics & O.R. is also approved but to avoid duplicacy it is decided that the programme is renamed as M.Sc. (Data Analytics) . The Dean is authorized to forward the M.Sc. (Data Analytics) course structure to the Academic Council after ratification and changes by the B.O.S. of Department of Statistics & O.R.	Approved

(Prof. **DEAN** Ali)
Dean
Faculty of Science
A. M. U., Aligarh

to : Assistant Registrar (Council) for necessary action.

o. (C) 2906

d 30/12/20

ncils. Section) at 4:10 pm

r Kashif

Joint Registrar

(Councils/परिषद्)

R.No. 4172 /FSc
Dated 23.10.2020

DEPARTMENT OF COMPUTER SCIENCE
ALIGARH MUSLIM UNIVERSITY,
ALIGARH

D.No. 1504 /Comp. Sc.
Dated 22-10-2020

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Minutes

Dated: 22.10.2020

Minutes of the online Special Meeting of Board of Studies held on
21.10.2020 at 11:30 a.m.

The following members were present:

1. Prof. Mohammad Ubaidullah Bokhari	Professor
2. Prof. Jamshed Siddiqui	Professor
3. Mr. S. Maheshwari	Associate Professor
4. Ms. Priti Bala	Associate Professor
5. Mr. Suhel Mustajab	Associate Professor
6. Dr. Aasim Zafar	Associate Professor
7. Mr. Shahid Masood	Associate Professor
8. Dr. Tamanna Siddiqui	Associate Professor
9. Ms. Sehba Masood	Assistant Professor
10. Dr. Arman Rasool Faridi	Assistant Professor
11. Dr. Swaleha Zubair	Assistant Professor
12. Dr. Faisal Anwer	Assistant Professor
13. Dr. Mohammad Sajid	Assistant Professor
14. Dr. Mohammad Nadeem	Assistant Professor
15. Prof. Rafiqul Zaman Khan (In Chair)	Chairperson, D/o Computer Science A.M.U., Aligarh.

S.O. / Mr. Ghayoor
1. One copy to AR (Hr)
2. To publish in next faculty meet
3. Appoint 9 A-Sys
DE-2021
Faculty of Science
A.M.U., Aligarh
23/10/2020

Prof. Rafiqul Zaman Khan, Chairperson chaired the meeting and welcomed all the members to the BoS meeting. The following items were discussed during the meeting:

Page 1 of 4

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ITEM #1: To discuss and consider the revised qualification and duration of MCA as per the AICTE letter Ref. No. F.No. AICTE/AB/MCA/2020-21 dated: 03.07.2020. (To be implemented from the academic session 2020-21).

➤ **Discussion & Decision:** The Members of the BoS discussed in detail revised qualification and duration of MCA as per the AICTE letter mentioned above and following decisions have been taken:

1. Change the name of the program from Master of Computer Science & Applications (MCA) to Master of Computer Applications (MCA) in conformity with the UGC/AICTE nomenclature and recommended its implementation with effect from session 2020-21.
2. Change the duration of MCA from three years program to two years as advised by the AICTE/UGC vide letter no. F.No. AICTE/AB/MCA/2020-21 dated: 03.07.2020 and recommended its implementation with effect from session 2020-21.
3. The qualification of two years MCA is amended as given

Existing:

Name of the Program/Subject	Allotted Seats	Faculty/ Department/ Centre	Duration (Semesters/Academic Years)	Minimum Eligibility Requirements for Admission
Master of Computer Science & Applications (MCA)	60	Department of Computer Science	6 Semesters (spread over 3 years)	B.Tech./B.Arch./B.E. with 55% marks in aggregate. OR 1 Bachelor Degree in Science from a recognized university with 55% marks in aggregate and must have studied Mathematics alongwith any two of the following subjects: Statistics, Physics, Chemistry, Computer Application, Computer Maintenance, Information Technology as main or subsidiary subject at the qualifying examination. 2 Must have studied Physics and Mathematics in the Senior Secondary School Certificate or its equivalent course.

Amended:

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Name of the Program/Subject	Allotted Seats	Faculty/Department/Centre	Duration (Semesters/Academic Years)	Minimum Eligibility Requirements for Admission
Master of Computer Applications (M.C.A.)	60	Department of Computer Science	4 Semesters (spread over 2 years)	<p>1. Passed Bachelor Degree in Computer Science / Engineering / Architecture/ Computer Applications/ Information Technology/ Computer Maintenance.</p> <p>OR</p> <p>1'. Passed B.Sc./B.Com/B.A. or equivalent (a candidate must either produce 'a valid certificate of passing at least two courses of Computer Science with at least 50% marks or equivalent from any Govt-approved mode at 10+2/graduation level' OR 'complete the bridge courses from the Department in the first semester of MCA')</p> <p>2. Must have studied mathematics at 10+2 Level or its equivalent course.</p> <p>3. Obtained at least 50% marks in the qualifying examination.</p>

(Annexure-A: Two years MCA structure)

ITEM #2: Approval of new program, M.Sc. in Data Science & Artificial Intelligence to be started in the Department of Computer science from session 2021-22.

- **Discussion & Decision:** The members of the BoS discussed the proposal of M.Sc. in Data Science & Artificial Intelligence and approved the same. (Annexure-B: Proposal of M.Sc. in Data Science & Artificial Intelligence).

ITEM #3: Approval of new program M.Sc. in Cyber Security & Digital Forensics to be started in the Department of Computer science from session 2021-22.

- **Discussion & Decision:** The members of the BoS discussed the proposal of M.Sc. in Cyber Security & Digital Forensics and approved the same (Annexure-C: M.Sc. in Cyber Security & Digital Forensics).

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Keeping in view the importance of the new programs M.Sc. in Data Science & Artificial Intelligence and M.Sc. in Cyber Security & Digital Forensics, (discussed in Item#2 & Item#3) the BoS unanimously decided that the programs should be started from the academic session 2021-2022 and the same are recommended to the Faculty and Academic Council for necessary approval. The UGC should be approached to sanction the posts to start and run the programs, and the proposal for the same be sent to the UGC. Till the sanction is awaited from the UGC, the Hon'ble Vice-Chancellor be requested to kindly allow to utilize at least three (03) vacant Assistant Professor post(s) of any other departments to run these two M.Sc. programs. As and when the sanction is received from the UGC, the said post(s) will be reverted back to the respective departments. The BoS further decided that these two new programs should be started after getting above said teaching post(s).

ITEM #4: Appointment of Co-supervisor of Mr. Ankur Kumar, a Ph.D. scholar working under the supervision of Dr. Mohammad Nadeem.

- **Discussion & Decision:** The members discussed the Co-supervisor (details given below) to be appointed of Mr. Ankur Kumar, a Ph.D. scholar working under the supervision of Dr. Mohammad Nadeem and approved the same.


Details of approved Co-supervisor of Mr. Ankur Kumar

Dr. Mohammad Shameem, [Ph.D. IIT (ISM, Dhanbad)]
 Assistant Professor
 Department of Computer Applications
 Madanapalle Institute of Technology and Science
 Madanapalle, Andhra Pradesh, India
 Research Publications: 22 (11 in SCIE indexed journals)

The Members appreciated the work of New Academic Programs Planning and Implementation Committee to design two years MCA structure and proposals of two new M.Sc. programs: M.Sc. in Data Science & Artificial Intelligence and M.Sc. in Cyber Security & Digital Forensics.

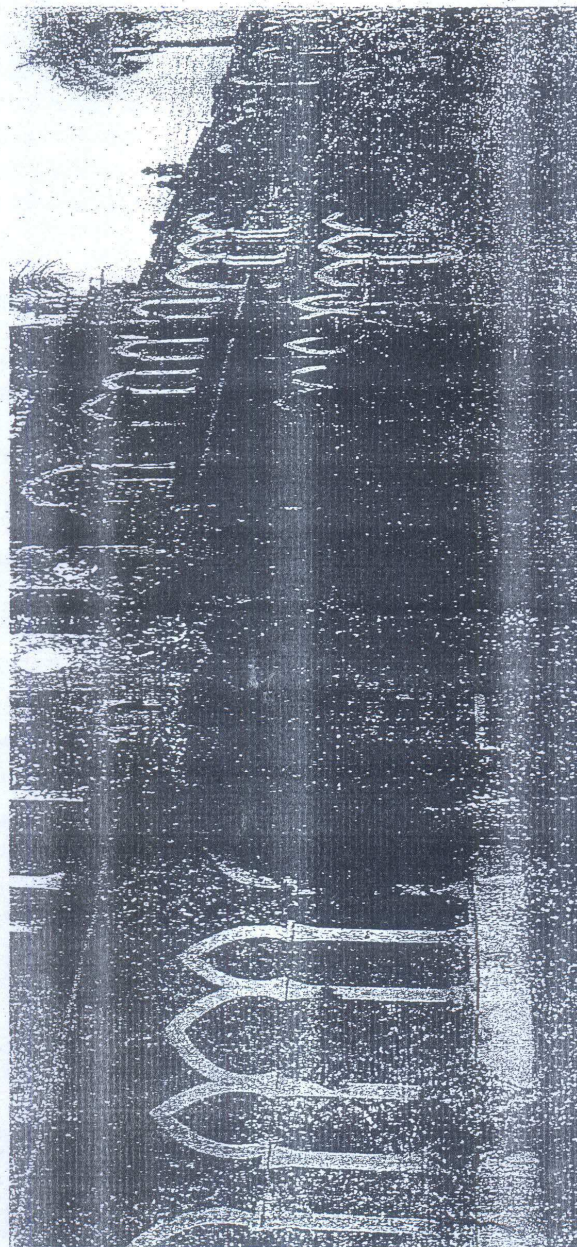
After discussion and approval of all the items of the agenda, the meeting came to end with vote of thanks to the chair.

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 22.10.2020
 (Prof. Rafiqul Zaman Khan)
 CHAIRPERSON
 Chairperson
 Dept. of Computer Science
 A.M.U., Aligarh

Annexure-A: Two years MCA structure

**Master of Computer Applications
(M. C. A.)**



**Department of Computer Science
Faculty of Science
Aligarh Muslim University**

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M.C.A. (2 Years Program)

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I.	Reference	1. Notification No. AICTE/AB/MCA/2020-21/03-07020) 2. Adaptation by BOS dated 21.10.2020 for MCA (2-Years) program.
II.	Bases	UGC Guideline on Choice Based Credit Based System (CBCS) – with greater autonomy to students on the selection of courses -- by reinforcing the following: 1. Retaining prescribed types as Core, Electives, CBCS, Ability/Skill enhancement courses. 2. Retaining the 4 th semester as full project-semester, because of the mandate of MCA as a professional program and placements.
III.	Periods Per Week (L+T)/P	1. Core Theory Courses: 3+1 and 1+1 2. Lab-Courses: 6 3. CBCS Elective Courses: 3+1 4. Ability Enhancement Course (Open Elective): 3+1
IV.	Eligibility Criteria	1. Passed Bachelor Degree in Computer Science / Engineering / Architecture/ Computer Applications/ Information Technology/ Computer Maintenance. OR 1. Passed B.Sc./B.Com/B.A. or equivalent (a candidate must either produce 'a valid certificate of passing at least two courses of Computer Science with at least 50% marks or equivalent from any Govt-approved mode at 10+2/graduation level' OR 'complete the bridge courses from the Department in the first semester of MCA') 2. Must have studied mathematics at 10+2 Level or its equivalent course. 3. Obtained at least 50% marks in the qualifying examination. Applicable to those who passed B.Sc./B.Com./B.A. or equivalent and not able to produce 'a valid certificate of passing at least two courses of Computer Science with at least 50% marks or equivalent from any Govt-approved mode at 10+2/graduation level'. 1. CBCS course of 4 credits need to be chosen from other departments of the faculty of science. 2. At least four courses shall be offered for each of the electives, provided a minimum of 15 students opt for the course and availability of teachers. 3. Department may float any other elective, beyond the listed ones, subject to feasibility and endorsement of BOS.
V.	Bridge Courses	
VI.	Notes	

ALIGARH MUSLIM UNIVERSITY
ALIGARH, U.P. - 202002
Master of Computer Applications (MCA) (CBCS)
Curriculum Structure

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MCA 1st Year-I-Semester

COURSE NO.	PAPER TITLE	Type of Course	Periods Per Week (L+T)/P	Credits	Sessional Marks/Continuous Evaluation	Final Marks	Total Marks
I st SEMESTER	CSD1001	Problem Solving using C	3+1	4	30	70	100
	CSD1002	Fundamentals of Algorithms	1+1	2	30	70	100
	CSD1003	Digital Logic and Computer Architecture	3+1	4	30	70	100
	CSD1004	Database Management System	3+1	4	30	70	100
	CSD1005	Systems Analysis and Design	3+1	4	30	70	100
	CSD1006	Soft Skills Development and Technical Communication	3+1	4	30	70	100
	CSD10P1	Laboratory Course -I	6	4	40	60	100
Total				26			700

MCA 1st Year-II-Semester

II nd SEMESTER	CSD2001	Object Oriented Programming using Java	3+1	4	30	70	100
	CSD2002	Object Oriented Analysis and Design	3+1	4	30	70	100
	CSD2003	Data Structure and its Applications	1+1	2	30	70	100
	CSD2004	Discrete Mathematics	1+1	2	30	70	100
	CSD2005	Data Communication & Computer Networks	3+1	4	30	70	100
	EL-1	Elective-1	3+1	4	30	70	100
	EL-2	Elective-2	3+1	4	30	70	100
	OE	Open Elective**	3+1	4	30	70	100
	CSD20P1	Laboratory Course -II	6	4	40	60	100
	Total				32		900

MCA 2nd Year-III-Semester

III rd SEMESTER	CSD3001	Operating System	1+1	2	30	70	100
	CSD3002	Software Engineering	1+1	2	30	70	100
	CSD3003	Theory of Computation and Compiler construction	3+1	4	30	70	100
	CSD3004	Microprocessor: Architecture and Applications	1+1	2	30	70	100
	CSD3005	Web based Programming	3+1	4	30	70	100
	CSD3006	Artificial Intelligence & Soft Computing	3+1	4	30	70	100
	EL-3	Elective-3	3+1	4	30	70	100
	EL-4	Elective-4	3+1	4	30	70	100
	CSD30P1	Laboratory Course-III	6	4	40	60	100
	Total				30		900

COURSE NO.	PAPER TITLE	- 142 -					Final Marks	
MCA 2 nd Year-IV-Semester								
IV th SEMESTER	CSD4491	Fundamentals of IT (Open Elective)*	OE	3+1	-	30	70	100
	CSD4001	Major Project	A		8	40	60	100
		Total			8			100

*L - Lecture; *T - Tutorial; *P - Practical/Lab; *D - Dissertation/Project;
#Non-credit and qualifying course

*L - Lecture; *T - Tutorial; *P - Practical/Lab; *D - Dissertation/Project;

#Non-credit and qualifying course

Course Categories and Credits allotted

S.No	Type of Courses	Code	Credits Allotted
1	Core	C	64
2	Elective (Discipline Centric)	E	16
3	Ability Enhancement (Discipline Centric)	A	12
4	Ability Enhancement (Open elective)	OE	4
5	Bridge Course	B	Non-Credit
Total Credits			96

List of Electives:

- Students are required to select one course from each set of electives (EL-1 to EL-4) offered by the department from time-to-time.

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Electives	Course No.	Paper Title	Course No.	Paper Title	Course No.	Paper Title
EL-1 (Credit-4)	CSD2051	Data Mining Techniques and Applications	CSD2052	Mobile Computing	CSD2053	Computer Graphics
EL-2 (Credit-4)	CSD2061	Parallel and Cloud Computing	CSD2063	Cyber Security	CSD2064	Advanced DBMS and Data Warehouse Design
EL-3 (Credit-4)	CSD3051	Linux and Shell Programming	CSD3052	Network Programming	CSD3054	Mobile Programming
EL-4 (Credit-4)	CSD3061	E-Commerce	CSD3062	Big Data Analytics	CSD3063	Optimization Techniques
						Introduction to Quantum Computing
						Introduction to Computational Finance
						Simulation and Modeling
						Fuzzy Systems and Control

****Students of the department of Computer Science are required to opt any Open Elective course offered by other departments of faculty of Science, in Second Semester preferably Mathematics, Statistics & OR, GIS, etc.**

CSD4491 (Open Elective): Fundamentals of IT (For fourth semester students of Faculty of Science other than Computer Science).