JAMIA MILLIA ISLAMIA
(A Central University by an Act of Parliament)
Department of Applied Sciences & Humanities
Faculty of Engineering and Technology
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28th September, 2017

NOTICE

A meeting of Board of Studies of the Department of Applied Sciences & Humanities is scheduled to be held on 3rd October, 2017 i.e. Tuesday at 11:30 a.m. in the office of the undersigned.

The agenda for the BOS meeting are as following:-

1. Confirmation of the minutes of the previous BOS held on 13/07/2017.
2. Extension of UGC Non-NET Fellowship of Ph.D. Students
3. Continuation of Mr. Intezar Hussain as Ph.D. student
4. Regarding Space and Increase in number of Sections for B. Tech. I year
5. Ph.D. Students related issues
6. Revision of M.Sc. Electronics Course Structure
7. Any other item with the permission of the chair.

28/09/2017

(Prof. Chaudhary Wali Mohammad)
Head

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Faculty of Engg. & Tech.
Jamia Millia Islamia
New Delhi-110025

Copy for the information:

- Prof. Ameer Azam, Department of Applied Physics, Z H College of Engineering & Technology, AMU
- Prof. Mohammad Saleem, Department of Applied Mathematics, Z H College of Engineering & Technology, AMU
- Prof. Tabrerz Alam, Department of Chemistry, JMI
- Prof. Haroon Sajjad, Department of Geography, JMI
- Secretary to Vice Chancellor, JMI
- Asstt. Registrar (Administration)
- The controller of Examinations, Faculty of Engineering & Technology
- The Dean, Faculty of Engg. & Tech., JMI
- All teachers of the Department

MINUTES OF THE MEETING OF BOARD OF STUDIES
DEPARTMENT OF APPLIED SCIENCES AND HUMANITIES

A meeting of the board of studies of the Department of Applied Sciences and Humanities was held on 03.10.2017 in the office of HoD at 11:30 a.m.

The following members were present

1.	Prof. Chaudhary Wali Mohammad	Chairman
2.	Prof. Ameer Azam	Member
3.	Prof. Mohd. Saleem	Member
4.	Prof. Haroon Sajjad	Member
5.	Prof. Masood Alam	Member
6.	Prof. M. Rafat	Member
7.	Prof. Weqar A. Siddiqui	Member
8.	Prof M. Mudassir Husain	Member
9.	Prof Zishan H. Khan	Member
10.	Dr. Mukesh P. Singh	Member
11.	Dr. Fehmeeda Khatoon	Member
12.	Dr. Satya Prakash Prasad	Member

Following matters were resolved:

1. The minutes of BOS meeting held on 13th July, 2017 were confirmed.

2. **A)** The UGC Non-NET fellowship of the following research scholars cannot be extended beyond the completion of four years as per the ordinance. However the scholar may continue his/her research work further.
   - **i)** Deepti Gupta (under the of supervision Prof. Musheer Ahmad)

   B) The UGC Non-NET fellowship of the following research scholars may be extended beyond the completion of three years as per the ordinance.
   - **i)** Chhavi Mangla (under the supervision of Prof. Musheer Ahmad)
   - **ii)** Mohd. Parvaz (under the supervision of Prof. Zishan H. Khan)
   - **iii)** Shikha Sharma (under the supervision of Dr. Fehmeeda Khatoon)

3. An application was received in the office of the department of Applied Sciences & Humanities. It was given by Mr. Intezar Hussain on 3/10/2017, regarding Ph.D. The said application was put before the BOS held on 3rd October, 2017. It was noted that the admission of Mr. Intezar Hussain (to Ph.D. programme) was recommended to be cancelled by the BOS in its meeting held on 23/02/2012. The cancellation had been endorsed by the Faculty committee in its meeting held on 04/02/2015. Now, Mr. Intezar Hussain has submitted his request for continuation in Ph.D. programme. The matter was discussed and it was resolved to forward the application to the Vice Chancellor, for his kind consideration. The copy of application of Mr. Intezar Husain(along with covering letter to Vice Chancellor is attached herewith.

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4. The Chairman informed the members of the BOS regarding theinadequate capacity of class rooms (theory / Lab.) arising due to increased student intake in B. Tech. 1st year.
   It was noted that a meeting was held on 21st September, 2017 with the Dean, Faculty of Engineering & Technology and it had been resolved that a new section F should be added in current semester (odd semester) and one more section namely Section G is needed to be added to existing sections in even semester.

5. The request of Mr. Irshad Ahmad (research Scholar working under supervision of Prof. Weqar A Siddqiui) as a special case of extension for one more year was accepted by the BOS. In this regard, a request letter is to be sent to the Vice Chancellor for his kind consideration.

6. The following minor changes in the Ph.D. topics of the following research scholars of Prof. Musheer Ahmad and Prof. M. Mudassir Husain were considered in the BOS and the same was approved:-

Student Name	Supervisor Name	Old Topic	New Topic
Vinod Kumar	Prof. Musheer Ahmad	**"Elliptic Curve Cryptography based Protocols for Big Data Security".**	**"Elliptic Curve Cryptography based Authentication Protocols for Information Security".**
Mohd. Taazeem Ansari	Prof. M. Mudassir Husain	**"MODELLING OF CARBON BASED NANO DEVICES FOR ELECTRONIC APPLICATION".**	**MODELLING OF MINIATURIZED FUNCTIONAL DEVICES EMPLOYING QUANTUM MECHANICAL METHODS FOR APPLICATIONS IN NANO - ELECTRONICS".**

7. The course structure for M.Sc. Electronics recommended by Committee of Course Structure for M.Sc. Electronics in a workshop held on 28th April, 2017 was placed before members for consideration. After thorough discussion member suggested minor corrections on the proposed course structure. Resultantly, the course structure was finalized (copy attached).

The meeting ended with a vote of thanks to the chair.

09/10/2017

(Prof. Chaudhary Wali Mohammad)
Chairman

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M.Sc. Electronics Course Structure (under CBCS)
Academic Session 2016-17

Course	Title of the paper	32 CREDITS
M. Sc. Electronics	EL-101: Electronics Devices	
I Semester	EL-102: Analog and Circuit Electronics	
	EL-103: Signal & Systems	
	EL-104: Microprocessors & Microcontrollers	
	EL-105: Advanced Mathematics in Electronics	
	EL-106: Fundamental of Nanotechnology (CBCS)	
	EL –107: Computer Architecture	
	EL-108: Microprocessors Lab (Lab – 1)	
	EL- 109: Electronics Devices Lab (Lab – 2)	
M. Sc. Electronics		**32 CREDITS**
II Semester	EL-201: AWP & Microwave Electronics	
	EL-202: Computational Methods and Computer Programming	
	EL-203: Digital Electronics	
	EL-204: Optoelectronics	
	EL-205: Nanomaterials, Synthesis & Applications (CBCS)	
	EL-206: Embedded Systems	
	EL-207: Opto-electronics Lab (Lab-3)	
	EL-208: Computer Programming Lab (Lab – 4)	

Summer Training in Industry/R&D Organizations during summer vacations (6 to 8 weeks)

M. Sc. Electronics		**24 CREDITS**
III Semester	EL – 301: Communication Electronics	
	EL – 302: Data Structures & Algorithms	
	EL – 303: Computer Communication & Networking	
	EL – 304: Control Systems	
	EL - 305: Green Electronics (CBCS)	
	EL – 306: Digital Signal Processing	
	EL-307: Science & Technology of Semiconductors Lab (Lab – 5)	
	EL – 307: Communications Lab (Lab – 6)	
M. Sc. Electronics		**20 CREDITS**
IV Semester	EL - 401: VLSI Circuit Design & Device Modelling	
	EL – 402: Summer Training Assessment	
	EL – 403: Project Work	
	EL – 404: Seminar	

Credits are assigned as follows:

Theory Papers	:	4 Credits
Practical Papers	:	2 Credits
Summer Training Assessment	:	2 Credits
Seminar	:	2 Credits
Project Work	:	12 Credits
Total	:	108 Credits

09/10/2017

(Prof. Chaudhary Wali Mohammad)
Head

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Department of Applied Science & Humanities, JMI
Course Structure for M.Sc. Electronics

Proposed Structure

Options for Specializations for M.Sc. Electronics Sciences

- VLSI & Embedded Systems
- Communication Technology
- Microelectronics & Device Modeling

Major Project:
In the final semester, students will spend four days a week in industries/ R&D organization to carry out their major project work (12 Credits) for a period of one semester. The topic can be decided in consultation with faculty members. They will be required to come to university once a week to attend their subject classes and to report the progress of the project.

Summer Project:
Students have to work on a summer project (4 Credits) in the summer break between 2nd and 3rd semesters. They have to for industrial training for a period of minimum 6 weeks under the guidance of an academic supervisor, with prior permission from the department.
Reports will be assessed before one week of 4th semester final exams.

Seminar:
Starting from the 3rd semester, every semester students will be required to present a seminar (total 4 Credits) on a topic of current importance after proper literature survey. The topic should be distinct from the final year major project and summer project.

Note: Elective course in II, III & IV-semester will be offered, only if minimum one third of total class strength opts for it.

Course Code	Name of the Course		Credits
SEMESTER I		**28 Credits**	
EL 101	Semiconductor devices		4
EL 102	Digital Electronics		4
EL 103	Analog Electronics -1		4
EL 104	Microprocessor & Microcontroller		4
EL 105	Network Analysis & Synthesis **(CBCS)**		4
EL 106	Advanced Engineering Mathematics		4
EL 107	Microprocessors Lab		2
EL 108	Semiconductor Devices & Circuits Lab		2
SEMESTER II		**28 Credits**	
EL 201	Signals & Systems		4
EL 202	EMFT & Antenna		4
EL 203	Microwave Devices & Circuits		4
EL 204	Opto Electronics		4
EL 205	Computational Methods & Computer Programming		4
-------	**Elective-I (CBCS)**		4
EL 208	Opto Electronics Lab		2
EL 209	Computer Programming Lab (NACP. Lab)		2

28/4/17 (R.S. Gupta) 28/04/2017 28/4/17 28/4/17 (Prof Mainuddin) HOD(E&C) 28.4.17 (P.K. Bhatnagar)

List of Papers for Elective-I

EL 206	Semiconductor Device Modeling & IC- Technology	4
EL 207	Nanotechnology, Meta-materials & Applications	4

SEMESTER III **29 Credits**

EL 301	Communication Systems	4
EL 302	Analog Electronics-II	4
EL 303	Data Structures & Algorithms	4
EL 304	**Computer Communication & Networking (CBCS)**	4
EL 305	Digital Signal Processing	4
*****	**Elective-II**	4
EL 309	Communication Lab	2
EL 310	Digital Signal Processing Lab	2
EL 311	Data Structures Lab	1

List of Papers for Elective-II

EL 306	Computer Architecture	4
EL 307	Control Systems	4
EL 308	Embedded Systems	4

SEMESTER IV **24 Credits**

EL 401	Major Project	12
EL 402	Summer Training Assessment	4
EL 403	Seminars & Lectures from Industry	4
*****	**Elective-III**	4

List of Papers for Elective-III

EL 404	CMOS Technology & VLSI Design	4
EL 405	Modern Communication Systems and Information Theory	4
EL 406	Green Electronics	4

Total Credits for the Programme = 28+28+29+24 = 109

28/4/17 (Prof R.S. Gupta) 28/4/2017 28/4/17 (Prof Maiwadkar) 28/4/17 (A. Kapoor) 28.4.17 (P.K. Bhatnagar)