



**REVA**  
**UNIVERSITY**  
Bengaluru, India

**PROCEEDINGS**  
**of the**  
**ACADEMIC COUNCIL MEETING**

**2017-18**



## ACADEMIC COUNCIL MEETING

15<sup>TH</sup> JUNE, 2017 AT 11.00 AM

CONFERENCE HALL, ADMINISTRATIVE BLOCK

Sl. No	Name of the Members	Designation	Signature
1	Dr. S Y Kulkarni, Vice Chancellor	Chairperson	
2	Dr. M Dhanamjaya The Registrar	Member Secretary	
3	Dr. P Ramachandra The Registrar (Evaluation)	Member	
4	<b>Deans of Faculties</b>		
(i)	Dr. Sunil Kumar Manvi, Dean of Engineering & Technology	Member	
(ii)	Dr. N Ramesh Dean, Training, Placement and Planning and Dean, Faculty of Science and Technology.	Member	—
(iii)	Dr. M. Dhanamjaya Registrar and Dean, Faculty of Commerce and Management Studies	Member	
(iv)	Prof. Payel Dutta Chowdhury Dean, Faculty of Arts and Humanities	Member	
(v)	Prof. Jagadeesh Chandra B S Faculty of Architecture	Member	
(vi)	Prof. Kalicharan Faculty of Law	Member	
5	<b>Directors of Schools</b>		
(i)	Prof. R C. Biradar Director, School of Electronics and Communication Engineering	Member	
(ii)	Prof. Ramalinga Reddy Director, School of Civil Engineering	Member	
(iii)	Dr. Rajashekar Mandi Director, School of Electrical and Electronics Engineering	Member	
(iv)	Dr. Narayanaswamy K S Director, School of Mechanical Engineering	Member	
(v)	Prof. Shubha A Director, School of Commerce	Member	
(vi)	Dr. S Senthil, Director, School of Computer Science & Applications	Member	 S. Senthil 15/6/17.

6	<b>Professors Nominated by the Vice-Chancellor</b>		
(i)	Dr. R Venkata Shiva Reddy School of Electronics & Communication Engineering	Member	<i>RShreddy</i>
(ii)	Dr. M M Bagali, School of Management Studies	Member	<i>Bagali</i>
(iii)	Dr. P Shivananda Director, School of Basic Sciences	Member	<i>Shivananda</i>
(iv)	Prof. Beena G Principal, RISM	Member	<i>Beena G</i>
7	<b>Associate Professors</b>		
(i)	Prof. B S Raju School of Mechanical Engineering	Member	<i>B.S. Raju</i> 15.6.17.
(ii)	Dr. D V Sunitha, School of Physical Science	Member	<i>Sunitha</i> 15/6/17
(iii)	Prof. Vimalaswamy School of Architecture	Member	<i>Vimalaswamy</i> 15/6/17.
(iv)	Prof. Subramanyam School of Commerce	Member	—
8	<b>Eminent Persons Nominated by the Chancellor</b>		
(i)	Dr. Sridhar Mitta Next Wealth Entrepreneurs Mobile: 9845016080 e-mail: <a href="mailto:sridhar.mitta@nextwealth.in">sridhar.mitta@nextwealth.in</a>	Member	<i>M. Sridhar</i> 15/06/17
(ii)	Dr. Ananth Koppar Chairman & CEO, KTwo Technology Solutions, Bangalore 560 098.	Member	—
(iii)	Dr. Hubert Reilard 16 C & D, KIADB Industrial Area, Attibele, Bengaluru-562107 e-mail: <a href="mailto:ein@in.efdgrou.net">ein@in.efdgrou.net</a>	Member	<i>Hubert Reilard</i>
(iv)	Dr. V G Talawar Advisor, REVA University	Member	<i>V.G. Talawar</i>
9	Prof. P S Venkataramu, Dean, Internal Quality	Member	<i>P.S. Venkataramu</i>
10	Dr. B P Divakar Dean, Research and Innovation Council	Member	<i>B.P. Divakar</i>
11	Dr. Kiran Kumari Patil Director University Industry Interaction Centre	Member	<i>Kiran Kumari Patil</i>
12	Smt. S Saraswathi Chief Librarian	Member	<i>Saraswathi</i>
13	Sri. Deepak C S Director-Physical Education	Member	<i>Deepak C S</i>

**Proceedings of the Tenth Academic Council meeting held on 15<sup>th</sup> June, 2017 (11.00 am)  
at the conference Hall, Administrative Block, REVA University, Rukmini Knowledge  
Park, Kattigenahalli, Yelahanka, Bengaluru – 560 064**

**Members Present:**

Sl. No	Name of the Members	Designation
1	Dr. S Y Kulkarni, Vice Chancellor	Chairperson
2	Dr. M Dhanamjaya The Registrar	Member Secretary
3	Dr. P Ramachandra The Registrar (Evaluation)	Member
4	<b>Deans of Faculties</b>	
(i)	Dr. Sunil Kumar Manvi, Dean of Engineering & Technology	Member
(ii)	Dr. N.Ramesh Dean, Training, Placement and Planning and Dean, Faculty of Science and Technology.	Member
(iii)	Dr. M. Dhanamjaya Registrar and Dean, Faculty of Commerce and Management Studies	Member
(iv)	Prof. Payel Dutta Chowdhury Dean, Faculty of Arts and Humanities	Member
(v)	Prof. Jagadeesh Chandra B S Faculty of Architecture	Member
(vi)	Prof. Kalicharan Faculty of Law	Member
5	<b>Directors of Schools</b>	
(i)	Prof. R C. Biradar Director, School of Electronics and Communication Engineering	Member
(ii)	Prof. Ramalinga Reddy Director, School of Civil Engineering	Member
(iii)	Dr. Rajashekar Mandi Director, School of Electrical and Electronics Engineering	Member
(iv)	Dr. Narayanaswamy K S Director, School of Mechanical Engineering	Member
(v)	Prof. Shubha A Director, School of Commerce	Member
(vi)	Dr. S Senthil, Director, School of Computer Science & Applications	Member
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(i)	Dr. R Venkata Shiva Reddy School of Electronics & Communication Engineering	Member
(ii)	Dr. M M Bagali, School of Management Studies	Member
(iii)	Dr. P Shivananda Director, School of Basic Sciences	Member

(iv)	Prof. Beena G Principal, RISM	Member
7	<b>Associate Professors</b>	
(i)	Prof. B S Raju School of Mechanical Engineering	Member
(ii)	Dr. D V Sunitha, School of Physical Science	Member
(iii)	Prof. Vimalaswamy School of Architecture	Member
(iv)	Prof. Subramanyam School of Commerce	Member
8	<b>Eminent Persons Nominated by the Chancellor</b>	
(i)	Dr. Sridhar Mitta Next Wealth Entrepreneurs Mobile: 9845016080 e-mail: <a href="mailto:sridhar.mitta@nextwealth.in">sridhar.mitta@nextwealth.in</a>	Member
(ii)	Dr. Ananth Koppar Chairman & CEO, KTwo Technology Solutions, Bangalore 560 098.	Member
(iii)	Dr. Hubert Reilard e-mail: <a href="mailto:ein@in.efdgroun.net">ein@in.efdgroun.net</a>	Member
(iv)	Dr. V G Talawar Advisor, REVA University	Member
9	Prof. P S Venkataramu, Dean, Internal Quality	Member
10	Dr. B P Divakar Dean, Research and Innovation council	Member
11	Dr. Kiran Kumari Patil Director University Industry Interaction Centre	Member
12	Smt. S Saraswathi Chief Librarian	Member
13	Sri. Deepak C S Director-Physical Education	Member

**Member not present:**

(ii)	Dr. Ananth Koppar Chairman & CEO, KTwo Technology Solutions, Bangalore 560 098.	Member
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**Proceedings**

At the outset, Dr. S Y Kulkarni, the Vice-Chancellor and the Chairman of the Academic Council welcomed all the members present, introduced the external members to the august house and explained the purpose of the meeting and the agenda in brief. Agenda were then taken up for discussion.

The Vice-Chancellor apprised about the action taken on decisions of the Academic Council on each of the agenda in its meeting held on 02.08.2016 and requested the members of the august body for their comments if any.

#### **Decision**

The house noted the action taken report on the decisions of the Academic Council in its meeting held on 02.08.2017.

#### **Agenda: AC 10.4**

#### **Action taken report on the decisions of the special meeting of the Academic Council held on 03.08.2016 at 11.00 AM**

The Vice-Chancellor apprised about the action taken on decisions of the special meeting of the Academic Council on the agenda in its meeting held on 03.08.2016 at 11.00 AM and requested the members of the august body for their comments if any.

#### **Decision**

The house noted the action taken report on the decisions of the special meeting of the Academic Council held on 03.08.2016 at 11.00 AM.

#### **Agenda: AC 10.5**

#### **Proceedings of the Sixth meeting of the Faculty of Engineering and Technology held on 24<sup>th</sup> May, 2017 at 02.30 PM, REVA University, Bengaluru**

The Vice-Chancellor requested the Dean, Faculty of Engineering and Technology to present the deliberations of the sixth meeting of the Faculty of Engineering & Technology held on 24<sup>th</sup> May, 2017 at 2.30 PM. to the august house. Prof. Sunil Kumar Manvi, Dean, Faculty of Engineering and Technology informed that it is proposed to give more weightage to practice and internship to B Tech students and therefore to teach engineering students foundations of basic science with a blend to the specialized branch of engineering subjects they would study and avoid to repeat the subject studied at 10 + 2 level. It is presumed that this will enable the B Tech students and teachers to concentrate more on teaching and learning of specialized branch of engineering subjects of present requirement of industries and other sectors from 1<sup>st</sup> to 7<sup>th</sup> semester and make the students free to take up internship in relevant industries / industry-based projects in the last 8<sup>th</sup> semester. He also informed that a little modification

has been done in the syllabus of all B Tech and M Tech programs. The Dean further mentioned that some of the members in the Faculty meeting suggested (i) to have a simpler course code for all the programs; (ii) to have English course in only 1<sup>st</sup> Semester instead of 2 semesters (1<sup>st</sup> & 2<sup>nd</sup> Semesters); (iii) to have hard core, soft core, and open elective courses in 1<sup>st</sup> year of PG programs and internships and project work in the 2<sup>nd</sup> year. This will help students to join companies for internship and projects for a larger period (almost 9 months); (iv) to have Open electives in even semesters, i.e., 2<sup>nd</sup> semester of PG programs and 6<sup>th</sup> semester of B Tech programs; (v) to have more integrated labs for all the engineering programs at the PG level; (vi) to include an alumni member in the BOS meetings; (vii) to have a Supplementary Semester for the failed students, who can re-register for the failed course (viii) to introduce Integrated PG courses of five year duration and integrated PhD (for both full time and part-time PG students). The Vice-Chancellor added that B Tech course curriculum is streamlined with specialization concepts at the undergraduate level from 2018-19 onwards.

Welcoming the initiative taken to give more emphasis on specialized area of engineering from the 1<sup>st</sup> year itself Mr. Sridhar Mitta, Member of the Academic Council suggested (i) to incorporate more of skill related curriculum (ii) to consult the syllabus of training schools in major industries such as TCS, IBM (iii) to obtain feedback of recently passed out and employed students of the University about the course curriculum and to have few of them as members of the Board of Studies, and (iv) to have continuous interaction and follow-up with industry experts and they should be involved in different activities of the University in various capacities. This will help the University not only in providing updated knowledge and skills required for industries but also build strong industry-academia relationship. He further suggested that the training / internship can be divided into three segments, to make the internship more effective and the faculty members should interact closely with the industries where the students are sent and ensure that the students submit their reports after due certification from the identified supervisor from the concerned industry. Mr. Hubert Reilard, another Member of the Council said that while concentrating on major industry requirements the medium scale and small scale industry requirements should not be neglected and the course curriculum should balance the requirement of industries at all levels. This is the fact which German technical institutions has more than 60% of the input for academia comes from small scale and medium industries. He also opined that the project work / internship have to be closely monitored and evaluated.

The Vice Chancellor asked the Director, School of Architecture to present if he has anything to be said about Architecture program. The Director, School of Architecture informed the

members that the last two semesters in Architecture are allotted for internship as per the regulation of COA. The Advisor, informed the members regarding project work / internships the provision has been already made in the REVA regulation and it is the responsibility of the respective schools to work out the curriculum accordingly and be approved in their respective BOS meetings. Mr. Hubert Reilard, Member requested the members to ensure that the project work / internship and closely monitored and evaluated.

#### **Decision:**

The house unanimously resolved to approve the proceedings of the sixth meeting of Faculty of Engineering and Technology held on 24.05.2017 and decided to explore the possibilities of enhancing internship duration for one entire semester of both B Tech and M Tech programs. Also decided to have internal guide from respective School and external guide from the concerned industry where the candidate has undertaken project work / internship. Further the council approved the proceedings relating to various Board of Studies as under:

#### **Proceeding of the BOS in Computer Science and Engineering**

1. **New Scheme and Syllabus for M Tech in computer Science and Engineering (FT) and M Tech in Data Engineering and Cloud Computing (FT) for 2017-19;**
2. New scheme and syllabus for B. Tech in Computer Science and Engineering with Cloud Computing and Data Analytics (Specialization-1) and Networking and Cyber Security (Specialization-2) from 2018-19 on words;
3. New Scheme of B. Tech in Computer Science and Engineering from 2018-19 on words;
4. Replacement of Basic Electrical Engineering lab and Workshop practice (BTEW16F1900) of first year with Basic Electrical Engineering lab (BTEE17F1900).
5. Replacement of "Communicative English" (BTCE16F1700) and "Technical Documentation" (BTTC16F2600) with "Technical Communication for Engineers -I" (BTCE17F1700) and "Technical Communication for Engineers -II" (BTTC17F2600);
6. To offer "Data Structures using C", " Internet Computing & Applications" and "Introduction to Cloud Computing and Data Science" as the open electives from the academic year 2017-18;
7. Schemes and Syllabus of M. Tech in Computer Network Engineering (Full Time) and M.Tech in Computer Science & Engineering (Part Time) approved in BOS/CIT/PCN/2015-16/4/02-04-2016 and BOS/CIT/PCS/2015-16/4/02-04-2016 for 2017-18

#### **Proceeding of the BOS in Electronics & Communication Engineering**

No specific issues, the proceedings of the BOS in Electronics & Communication Engineering were approved



### **Proceeding of the BOS in Civil Engineering**

8. Adaption of new curriculum from III semester to VIII semester of B Tech Civil Engineering effective from 2017.

### **Proceeding of the BOS in Mechanical Engineering**

9. Revised syllabus of 7<sup>th</sup> and 8<sup>th</sup> semester of B Tech (for 2014 batch of students)
10. Revised syllabus of B Tech 1<sup>st</sup> semester to 8<sup>th</sup> semester for batches of students of 2015-16, 2016-17 and 2017-18;
11. Revised scheme of instruction of M Tech in Machine Design & Dynamics for the academic year 2017-18;
12. Change of nomenclature of M.Tech (Machine Design and Dynamics) to M.Tech (Machine Design).

### **Proceeding of the BOS in Electrical and Electronics Engineering**

13. Revised syllabus of 3<sup>rd</sup> and 4<sup>th</sup> year (5<sup>th</sup> semester to 8<sup>th</sup> semester) syllabus of B Tech for 2015-19 and 2016-20 batch of students;
14. Revised syllabus of 1<sup>st</sup> and 2<sup>nd</sup> year of B Tech 2017-21 batch of students;
15. Revised syllabus of 1<sup>st</sup> and 2<sup>nd</sup> year M Tech in Power Electronics program;

16. Inter change of the B Tech 5<sup>th</sup> Semester and 6<sup>th</sup> Semester syllabus as under:

SC group 1: a) Electrical Power Utilization BTEE156301  
b) Electrical Drives BTEE156302  
c) Digital System Design using VHDL BTEE156303  
d) Computer networking BTEE156304

SC group 2: a) Electricity Regulations BTEE156401  
b) Non-conventional Energy Sources BTEE156402  
c) Industrial Instrumentation & Automation BTEE156403  
d) Programming in Java BTEE156404

17. Courses / Subjects changed from Fifth to Sixth semester are:

Hard Core 1: High Voltage Engineering BTEE155300

Hard Core 2: Theory and Applications of Linear Integrated Circuits BTEE155400

**Agenda: AC 10.6**

**Proceedings of the meeting of the Faculty of Science and Technology held on 25<sup>th</sup> May, 2017 at 2.30 PM in the Conference Hall, Administrative Block, REVA University, Bengaluru**

## **Decision:**

The Council unanimously resolved to approve the proceedings of the meeting of Faculty of Arts and Humanities held on 14.06.2017 and in particular the proceedings of the meetings of the BOS in English, in Hindi, in Kannada, in Media Studies, and in Performing Arts detailed below:

### **Proceedings of the Board of Studies in English held on 19<sup>th</sup> & 20<sup>th</sup> December 2016.**

1. Revision of Technical English syllabus for first year B.Tech students based on practical approach.
2. Approval of change in evaluation pattern for first year B.Tech C1 and C2 examination.
3. Approval of shifting the courses "Critical Theories-I" and "Critical Theories-II" from 1<sup>st</sup> and 2<sup>nd</sup> Semesters of M.A. English to 3<sup>rd</sup> and 4<sup>th</sup> Semesters respectively, and in turn "American Literature-I" to the 1<sup>st</sup> Semester and "New Literatures in English" to the 2<sup>nd</sup> Semester.
4. Modification of syllabus of courses on ELT.

### **Proceedings of the Board of Studies in Hindi held on 4<sup>th</sup> March 2017.**

1. Approval of new scheme and syllabus for language Hindi for I and II Semesters BBA, B.Com, BCA and BA with combination of Journalism English and Psychology.
2. Approval of pattern of question paper for C3 examination.

### **Proceedings of the Board of Studies in Kannada held on 15<sup>th</sup> March 2017.**

1. Approval of new scheme and syllabus for language Hindi for I and II Semesters BBA, B.Com, BCA and BA with combination of Journalism English and Psychology.
2. Approval of pattern of question paper for C3 examination.

### **Proceedings of the Board of Studies in Media Studies held on 2<sup>nd</sup> May 2017.**

1. Introduction of 2 new programs – B.A. with combination of Journalism English and Psychology and M.A. in Journalism & Communication.
2. Approval of the scheme of instruction, detailed syllabus, and eligibility criteria.
3. Approval of detailed scheme of examination and the pattern of question papers.

### **Proceedings of the Board of Studies in Performing Arts held on 13<sup>th</sup> June, 2017.**

1. Preparation of Course Curriculum for MFA (Bharathanatyam) and MFA (Kuchipudi)
2. Preparation of Scheme of Examination for MFA (Bharathanatyam) and MFA (Kuchipudi)
3. Preparation of Panel of Examiners for MFA (Bharathanatyam) and MFA (Kuchipudi)

**Agenda: AC H.9.10**

**Modification of the Eligibility Criteria for 5 year B Arch program as per the Amendment of COA (Minimum Standards of Architectural Education) Regulations, 1983**

The Vice-Chancellor requested Prof. Jagadeesha Chandra B S, Director, and School of Architecture to present modifications. The Director explained the recent circular received from the Council of Architecture, New Delhi regarding revised eligibility criteria for 5 year B Arch program. He said that the COA has made it compulsory for students to score 50% marks in Physics, Chemistry and Mathematics and also 50% marks in aggregate in place of 50% marks in aggregate as per earlier criteria.

**Agenda: AC 10.9**

**REVA University regulations for part time Post Graduate Diploma in Management – Business Analytics program, 2016**

Appraising the august house about the introduction of part time Post Graduate Diploma in Management (PGDM) – Business Analytics program, 2016, Vice-Chancellor highlighted the objectives of the REVA Academy for Corporate Excellence (RACE). He said PGDM in Business Analytics program is meant for executives working in Corporates. This program is conceived to enhance the knowledge and skills of Corporate executives in Business Analytics and its application in the areas of their working. Regulations for this PGDM – Business Analytics have been drafted and placed before the Academic Council for consideration and approval. He also mentioned that two more programs are in the pipeline. The Advisor explained that the program is inter-disciplinary and the classes are conducted by the professionals from IBM and ORACLE apart from internal faculty. The students are given project work to complete on day to day basis. The Regulations are framed accordingly.

**Decision:**

The house unanimously resolved to approve draft REVA University Regulations for part time Post Graduate Diploma in Management – Business Analytics program, 2016.

**Agenda: AC 10.10**

**Revision of M Sc in Chemistry Scheme of Instruction and Syllabus**

The Vice-Chancellor informed the august house that the Board of Studies in Chemistry has revised the scheme of instruction and detailed syllabus. The Faculty of Science & Technology has approved the same and the matter is placed before the house for consideration and decision. The house discussed and decided as under:

### **Proceeding of the BOS in Civil Engineering**

8. Adaption of new curriculum from III semester to VIII semester of B Tech Civil Engineering effective from 2017.

### **Proceeding of the BOS in Mechanical Engineering**

9. Revised syllabus of 7<sup>th</sup> and 8<sup>th</sup> semester of B Tech (for 2014 batch of students)
10. Revised syllabus of B Tech 1<sup>st</sup> semester to 8<sup>th</sup> semester for batches of students of 2015-16, 2016-17 and 2017-18;
11. Revised scheme of instruction of M Tech in Machine Design & Dynamics for the academic year 2017-18;
12. Change of nomenclature of M.Tech (Machine Design and Dynamics) to M.Tech (Machine Design).

### **Proceeding of the BOS in Electrical and Electronics Engineering**

13. Revised syllabus of 3<sup>rd</sup> and 4<sup>th</sup> year (5<sup>th</sup> semester to 8<sup>th</sup> semester) syllabus of B Tech for 2015-19 and 2016-20 batch of students;
14. Revised syllabus of 1<sup>st</sup> and 2<sup>nd</sup> year of B Tech 2017-21 batch of students;
15. Revised syllabus of 1<sup>st</sup> and 2<sup>nd</sup> year M Tech in Power Electronics program;
16. Inter change of the B Tech 5<sup>th</sup> Semester and 6<sup>th</sup> Semester syllabus as under:

SC group 1: a) Electrical Power Utilization BTEE156301  
b) Electrical Drives BTEE156302  
c) Digital System Design using VHDL BTEE156303  
d) Computer networking BTEE156304

SC group 2: a) Electricity Regulations BTEE156401  
b) Non-conventional Energy Sources BTEE156402  
c) Industrial Instrumentation & Automation BTEE156403  
d) Programming in Java BTEE156404

17. Courses / Subjects changed from Fifth to Sixth semester are:  
Hard Core 1: High Voltage Engineering BTEE155300  
Hard Core 2: Theory and Applications of Linear Integrated Circuits BTEE155400

### **Agenda: AC 10.6**

**Proceedings of the meeting of the Faculty of Science and Technology held on 25<sup>th</sup> May, 2017 at 2.30 PM in the Conference Hall, Administrative Block, REVA University, Bengaluru**

The Vice-Chancellor informed about the absence of Dr. N Ramesh, Dean, Faculty of Science and Technology and requested Dr. V G Talawar, Advisor to present the proceedings of the Faculty of Science and Technology held on 25<sup>th</sup> May, 2017. Dr. V G Talawar informed the members that the syllabus of was revised / modified for BCA, B Sc (Honors) with specialization of Cloud Computing and Big Data, M Sc in Bio-Technology, M Sc in Biochemistry, MCA, M S in Computer Science are the programs offered under the Faculty of Science & Technology. Prior to 2016-17, M Sc in Bio-Technology, M Sc in Biochemistry programs were being offered by REVA Institute of Science & Management affiliated to Bangalore University. After having commenced these programs under REVA University the scheme of instructions, syllabus of both the programs have been thoroughly revised to suit to industry requirements. B Sc (Honors) with specialization of Cloud Computing and Big Data is most sought after program. Efforts were made to start M Sc in Applied Mathematics and M Sc in Chemistry since inception of University. However, there were no takers as science programs do not have much demand. The concerned BOS have relooked into the syllabus and modified the syllabus to suit to industry requirements. UGC Committee visited during September, 2016 suggested to introduce M Sc in Physics and recently there are few enquires for admission to this program. Therefore, the scheme of instruction and syllabus for M Sc in Physics has been drafted by the Board of Studies in Physics. The scheme of instruction and detailed syllabus for M Sc in Clinical Research has also been prepared and approved by the members of the concerned BOS. The details of the scheme of instruction and syllabus of all these programs were placed before the Faculty of Science & Technology and the Faculty unanimously has approved the recommendations of the concerned Board of Studies. Hence the proceedings of the Faculty of Science & Technology along with the recommendations of the concerned Board of Studies are placed before the august body for consideration and decision. Mr. Sridhar Mitta expressed that there is more demand for M Sc in Mathematics with Data Sciences and Analytics. Therefore, the University shall think of orienting M Sc Mathematics towards Data Science and Analytics. The Dean, Faculty of Engineering & Technology informed the august house that the M S in Data Science has been initiated under the Faculty of Engineering & Technology. Sridhar Mitta said similar M Sc Data Science and Analytics orienting towards Mathematics shall be started under Faculty of Science and Technology.

**Decision:**

The house unanimously resolved to approve the proceedings of the meeting of Faculty of Science and Technology held on 25.05.2017; in particular the following recommendations of the Boards of Studies and Faculty of Science & Technology were approved.

**Proceedings of the BOS Meeting in Biotechnology held on 20<sup>th</sup> Feb, 2017**

1. Revision of Syllabus and consolidation of credit hours for M.Sc Biotechnology program.

**Proceedings of the BOS Meeting in Bio-Chemistry held on 3<sup>rd</sup> November 2016**

2. Revision / Modification of Scheme of Instruction and Syllabus and consolidation of credit hours for M.Sc Biochemistry program.

**Proceedings of the Board of Studies in Computer Science and Applications held on 30<sup>th</sup> April, 2016 and 19<sup>th</sup> December, 2016.**

3. Modification of Scheme of instructions and syllabus of MCA and BCA programs.
4. Modification in syllabus of M S in Computer Science

**Proceedings of the Board of Studies in Clinical Research held on 01<sup>st</sup> April, 2017.**

5. The scheme of instruction, detailed syllabus of M Sc in Clinical Research.

**Proceedings of the meeting of the Board of Studies in Mathematics.**

6. Change of nomenclature of M Sc in Applied Mathematics to M Sc in Mathematics.
7. Scheme of instruction, detailed syllabus of M Sc in Mathematics.

**Proceedings of the meeting of the Board of Studies in Physics.**

8. Introduction of M Sc in Physics, and scheme of instruction, detailed syllabus of M Sc in Physics

**Proceedings of the meeting of the Board of Studies in Chemistry.**

9. Modified scheme of instruction, detailed syllabus of M Sc in Chemistry

**Agenda: AC 10.7**

**The Meeting of the Faculty of Commerce and Management Studies held on 29<sup>th</sup> May, 2017 at 11.00 AM.**

amended the eligibility Criteria for Admission to five Year Law degree programs in India based on the Legal Education Committee recommendation in its meeting held on 30th April, 2017 and made it mandatory for all the Universities under their educational institutions to follow the amended eligibility criteria i.e., candidates seeking admission to five Year BA LLB (H) and BBA LLB (H) programs shall have successful completion of Pre-University Course or Senior Secondary School course (10+2) in aggregate not less than 45% (40% in the case of candidates belonging to SC/ST, 42% in case of OBC categories) of the total marks and also the candidates obtaining 10+2 directly without having any basic qualification for prosecuting such studies and having passed job oriented course and diploma course is not eligible for admission to B.A., LL.B (Hons) and B.B.A LL.B (Hons) degree programs. Accordingly the REVA University proposes to amend the eligibility criteria for Admission to five Year BA LLB and BBA LLB programs and incorporate the same in the existing REVA University Regulations for Choice Based Credit System (CBCS) and Continuous Assessment Grading Pattern (CAGP) for Law Graduate Degree Programs. The subject is placed before the Academic Council for consideration and approval.

**Decision:**

The house unanimously resolved to approve the modifications of the Eligibility Criteria for 5 year BA LLB and BBA LLB programs as per the amendment made by Bar Council of India (Legal Education Committee).

**Agenda: AC 13.8**

**Proceedings of the meeting of the BOS in Performing Arts held on 28<sup>th</sup> Sept 2017, Scheme of Instruction and detailed Syllabus for Master of Performing Arts (MPA) for the Academic Year 2017-19**

The Vice-Chancellor apprised the members of the Academic Council that the Board of Governors in its meeting held on 21st February, 2017 decided to introduce MFA in Bharathanatyam and MFA in Kuchipudi programs in REVA University from the academic year 2017-18. Accordingly, the University constituted the Board of Studies in Fine Arts and convened the meeting of the same on 13<sup>th</sup> June, 2017. The Board of Studies in Performing Arts met on said day discussed the matter and prepared the Scheme of Instruction, the Scheme of Examination, and also detailed syllabus for MFA (Kuchipudi) and MFA (Bharathanatyam) programs and recommended to adopt the same in REVA University from the academic year 2017-18. The matter along with the scheme of instruction, scheme of examination, pattern of question papers and the detailed syllabus for MFA in Bharathanatyam and MFA in Kuchipudi programs prepared by the Board of Studies and approved by the Faculty of Arts & Humanities were placed before the Academic Council in its meeting held on 15<sup>th</sup> June, 2017. The Council approved the recommendations of the Board of Studies in Fine Arts and the Faculty of Arts & Humanities along with the scheme of instruction, scheme of examination and the syllabus of MFA (Kuchipudi) and MFA (Bharathanatyam) programs. Accordingly these two programs were started in

REVA University and admissions were made. However, the students who joined these programs represented to the University requesting for a single master degree program in Fine Arts (Master of Fine Arts, MFA) in place of two programs as it would be more advantageous for them to study the fundamentals of Fine Arts in general and the specializations such as Bharathanatyam, Kuchipudi, Mohiniyattam etc, as electives. The representation of the students was placed before the Board of Studies in Fine Arts in its meeting held on 28.09.2017. The Board complied with the students request and recommended to the University to offer two year Master Degree program in Performing Arts (MPA) to fall in line with UGC nomenclature in place of two master's degree programs in Fine Arts i.e., MFA (Kuchipudi) and MFA (Bharathanatyam). The Board also prepared the Scheme of Instruction, the Scheme of Examination, and the detailed syllabus for MPA program with a provision to study the specialized courses Bharathanatyam and Kuchipudi and recommended to introduce the same in REVA University from the academic year 2017-18 in place of two separate programs in Fine Arts i.e., MFA (Kuchipudi) and MFA (Bharathanatyam). He said the Scheme of Instruction, the Scheme of Examination, pattern of question papers and the detailed syllabus for two year MPA program prepared by the Board of Studies are placed at the Annexure for consideration and decision of the August House. The members after examining the issue decided as under.

**Decision:**

All the members of the Academic Council unanimously decided to offer one MPA (Master of Performing Arts) program of two years duration from the academic year 2017-18 in place of two MFA programs i.e., MFA (Kuchipudi) and MFA (Bharathanatyam) programs. The Council also approved the Scheme of Instruction, the Scheme of Examination, and the detailed syllabus of two year MPA (Master of Performing Arts) program prepared by the Board of Studies in Fine Arts.

**Agenda: AC 13.9**

**Introduction of New Programs during the Academic Year 2018-19**

The Vice-Chancellor said that REVA University while giving importance to all the faculties has decided to promote Science & Technology and therefore intends to commence more and more UG and PG programs in Science and orient them towards technology. The University has adequate infrastructure and other facilities required to impart additional programs in REVA University. Considering the need and importance of science programs and also programs in Performing Arts and Law it is proposed to commence the following new programs during the academic year 2018-19:

1. B Sc with Physics, Chemistry, & Mathematics (PCM) combination
2. B Sc with Physics, Mathematics and Computer Science (PMCS)
3. B Sc with Computer Science, Maths and Statistics (CS MS) combination
4. B Sc with Physics, Maths and Statistics (PMS) combination
5. B Sc Physics, Computer Science and Biology (PCSB)





REVA  
UNIVERSITY

Bengaluru, India

**Proceedings**  
of  
**BOS Meeting**

**2017-18**

**School of Electrical and Electronics Engineering  
Board of Studies in Electrical & Electronics Engineering  
Minutes of Meeting**

Ref: REVA/EEE/BOS/2017/1

Date: 16<sup>th</sup> May, 2017

**Time: 2:00 PM**

**Venue: Board Room, C V Raman Block**

Dr. Rajashekar P. Mandi, Director and Chairperson of BOS committee welcomed all the BOS members, highlighted about the work carried out on strengthening of the curriculum and syllabus for both PG and UG of School of EEE. All the BOS members have introduced.

The following members were present during the meeting and taken part in discussion:

Sl. No.	Name of the Member	Designation	Affiliation
1.	Dr. Rajashekar P Mandi	Chairperson	REVA University, Bangalore
2.	Dr. Divakar B.P	Member	REVA University, Bangalore
3.	Dr.Narendranath Udupa	Member	Philips, Bangalore
4.	Mr. Nagaraj HediyaI	Member	eNLiven Technologies, R&D centre & Design Consultants, Bangalore
5.	Mr.K. Narayana Swamy,	Member	REVA University, Bangalore
6.	Dr.Vishu Kumar	Member	REVA University, Bangalore
7.	Dr. Madhusudhana Reddy M B	Member	REVA University, Bangalore
8.	Mr. Mahesh G.S	Member	REVA University, Bangalore
9.	Mr. G Raghavendra	Member	REVA University, Bangalore
10.	Mrs. Bharathi Devi	Member	REVA University, Bangalore
11.	Mrs. Sujo Oommen	Member	REVA University, Bangalore
12.	Mr. Sagar B S	Member	REVA University, Bangalore

**Meeting agenda:**

1. Finalising the syllabus of 3<sup>rd</sup> and 4<sup>th</sup> year (5<sup>th</sup> semester to 8<sup>th</sup> semester) for UG for the 2015-19 batch and 2016-20 batch.
2. Revision of 1<sup>st</sup> to and 2<sup>nd</sup> year syllabus for UG for the new batch 2017-21 of entire syllabus
3. Revision of 1<sup>st</sup> and 2<sup>nd</sup> year syllabus for PG, for the school of EEE

The meeting was held as per the above agenda and following discussions were held. The points are noted as below:

**Points:**

**Program: BTECH in Electrical and Electronics Engineering**

**I Year Syllabus:**

- For 2017 to 2021 batch BEE and workshop taken out and added electrical experiments in BEE laboratory. The common BEE laboratory syllabus is designed for 1<sup>st</sup> year students of EEE, ECE and C&IT schools.
- Technical English I & II: Two technical English theory cum practical of 2 credits are included in 1<sup>st</sup> year two semesters.
  - Include Soft skills, Technical debates and presentation of technical things.
- Physics: Credits (3:0:0) for EEE
- Technical English I to be studied first and then Technical English II, irrespective of whether Physics cycle or Chemistry cycle is offered at the beginning

**III & IV Semesters**

- AECD & DECD:
  - Application oriented teaching should be inculcated, especially with the usage of datasheets in design problems.
- Microcontrollers:
  - Include advanced microcontroller in the syllabus. Basic microcontroller to be used as MSP430
  - Can include 8051 but have advanced microcontrollers and to go with application based learning

**V semester:**

- No changes highlighted

**VI Semester:**

- Combining Programs of C & C++
- Rephrase the syllabus of the subject: Trouble shooting of common Electrical Appliances.
  - Case studies have to be included
  - Video lectures with how to trouble shoot the faults

- Lab component has to be included
- PPT / Pictures for different area where trouble shooting required (real time examples/ Case study)
- Electrical safety:
  - Lab component has to be included
  - Case studies have to be included
- Project management & Entrepreneurship have to be replaced with other subject
- In sixth semester, for three Soft core groups (4 courses), one course related to computer, one course related to electronics & communication, one course related to power system and one course related to power electronics are included in syllabus to provide the options to the students to opt for specialization in their own particular interested area. The BOS members have appreciated this concept.

#### VII Semester:

- Title has to be modified for the subject: Computer aided Power System Analysis & stability.
- In seventh semester also, for three Soft core groups (4 courses), one course related to computer, one course related to electronics & communication, one course related to power system and one course related to power electronics are included in syllabus to provide the options to the students to opt for specialization in their own particular interested area.
- Soft Core subjects and/or elective offered should be applicable to electrical domain
- Computer Networking:
  - Case studies have to be included
- Subjects/topics like: Energy Management and Remote Monitoring can be included
- For the subject: Industrial Instrumentation & Automation:
  - Refer National Instruments (NI website) for modification in syllabus
- For the subject: Power System Protection:
  - Title has to be modified as per the available syllabus
  - Case studies on line diagram of electrical system with all protection devices can be included
- In order to give more importance for project based learning, project phase I is included in 7<sup>th</sup> semester as hardcore. In this, the students have to prepare and submit synopsis for

project before C1, presentation during C1 test, literature survey for the project is to be completed before C2, presentation during C2 test and during C3 presentation related synopsis, literature review and future plan of project is to be presented.

### VIII Semester:

- For the subject: Electrical Distribution System
  - Subject could to be replaced with the following subjects:
    - Demand Side management System
    - Electrical Energy Storage Systems
    - Secondary Power Source Systems: which could include Fly wheel System, Ultra capacitors, Compressed Air systems etc.
- For the subject: Electricity Regulations
  - To consider this as hard core

### Program: M.TECH in Advanced Power Electronics

- For the subject: Power Semiconductor Devices & Design Issues
  - Title has to be changed to: Power Semiconductor Devices & Design Methodology
  - Include the topics: opto-isolators and solid state relays
  - Lab component has to be included (types of experiments are mentioned)
    - Different characteristics of Various types of MOSFETs (N/P type) for different applications
    - Design of snubber circuits to be included
    - Design of gate drives for different switches to be included
    - Some real time applications to be included
- Along with the subject titled: Dynamics of Linear systems, the other subject could be included like: PLD, also as soft core subject
- For the subject PLD
  - applications of PLDs
    - Servomotor control
    - Stepper motor control
    - More electrical applications oriented
    - Books to Refer: Xilinx & Ultra
- PLL conversion, grid tie inverter has to include in Power converters
- EMC/EMI:


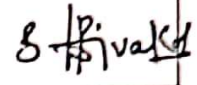

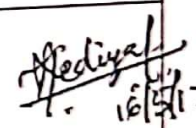

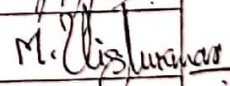
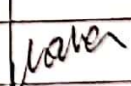
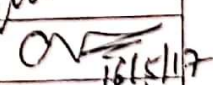
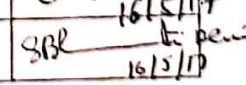
- Introduce as a Hard Core subject
- Title could be modified as: Analysis of EMC/EMI or Study of EMC/EMI
- Case study should be included: Design of components, airflow or issues due to air bubbles in PLC
- EMC/EMI filters design could be included. Can refer company websites for application notes
- Various testing levels can be included as per the guidelines available set by industries(board level testing, system level testing& environmental testing)
- DST proposals can be framed for design of filters and also under Make in India scheme
- Suggested to conduct FDPs for specialized subject for minimum 5 days (includes practical oriented training), before handling the subject.



*[Signature]*  
19/5/2017  
Director, School of EEE & Chairperson of BOS  
Director  
School of Electrical &  
Electronics Engineering  
REVA University, Rukmini Knowledge Park  
Kattigenahalli, Yelahanka, Bangalore - 560074

## Board of Studies in Electrical & Electronics Engineering

BOS Meeting on 16-05-2017

Sl. No.	Name of the Member	Designation	Affiliation	Signature
1.	Dr. Rajashekar P Mandi	Chairperson	REVA University, Bangalore	 16/5/2017
2.	Dr. Divakar B.P	Member	REVA University, Bangalore	 16/5/2017
3.	Dr. P.S. Venkataramu	Member	REVA University, Bangalore	-
4.	Dr. Ravishankar Deekshith	Member	BMSCE, Bangalore	-
5.	Dr. Narendranath Udupa,	Member	Philips, Bangalore	
6.	K Nagdev Singh	Member	EFD Induction Private Limited, Bangalore	-
7.	Mr. Paramesha K	Member	KERC, Bangalore	-
8.	Mr. Nagaraj HediyaI	Member	eNLiven Technologies, R&D centre & Design Consultants, Bangalore	 16/5/17
9.	Dr. C.S. Sharma,	Member	Indian Space Research Organization (ISRO), Bangalore	-
10.	Mr. K.Narayana Swamy,	Member	REVA University, Bangalore	
11.	Dr. Vishu Kumar	Member	REVA University, Bangalore	
12.	Prof. Sudhakar Rao P	Member	REVA University, Bangalore	-
13.	Mr. Mahesh G.S	Member	REVA University, Bangalore	
14.	Mr. G Raghavendra	Member	REVA University, Bangalore	 16/5/17
15.	Mrs. Bharathi Devi	Member	REVA University, Bangalore	 16/5/17



16.	<b>Dr. Madhusudana Reddy M.B.</b>	Member	REVA University, Bangalore	<i>M. Reddy</i>
17.	<b>Mrs. Sujo Oommen</b>	Member	REVA University, Bangalore	<i>S. Oommen</i>
18.	<b>Mr. Sagar B.S.</b>	Member	REVA University, Bangalore	<i>B.S. Sagar</i>







School of Computing and Information Technology

Date: 08-04-2017

Proceedings of the Meeting of the Board of Studies in School of Computing and Information Technology held on 08/04/2017

Members Present:

Sl.No.	Name of the Faculty	Position	Signature
1	Dr. Sunilkumar S. Manvi Director, School of C & IT	Chairman	
2	Dr. Sathish Babu Professor and Head, SIT, Tumkur <a href="mailto:bsb@sit.ac.in">bsb@sit.ac.in</a> , <a href="mailto:bsbsit@gmail.com">bsbsit@gmail.com</a> 9844488329	Member	
3	Mr. Shivakumar Chetan, General Manager, CISCO, Bengaluru <a href="mailto:Shivakumar.chetan@gmail.com">Shivakumar.chetan@gmail.com</a> 09844092785	Member	
4	Muralidhar Jahagirdar, Practice Head, ATMECS Technologies 9591330009 <a href="mailto:murali.sj@atmeecs.com">murali.sj@atmeecs.com</a>	Member	
5	Mr. Pradeep G. Vice President <a href="mailto:pradeep@fice.in">pradeep@fice.in</a> 9980136933	Member	ABSENT
6	Mr. Ambadas T. IBM, Bengaluru 7483006565 <a href="mailto:Ambadas.t.t@in.ibm.com">Ambadas.t.t@in.ibm.com</a>	Member	
7	Dr. Mallikarjuna Shastry P.M. Professor, School of C & IT	Member	
8	Dr. Kirankumari Patil Professor, School of C & IT	Member	
9	Prof. Ashwinkumar U. M. Associate Professor,	Member	
10	Dr. Mallikarjuna Kodabagi Professor, School of C & IT	Member	
11	Dr. Vishwanath Professor, School of C & IT	Member	

The following members expressed their inability to attend the meeting due to their other commitments.

1. Mr. Ananth kolhar,  
Vice President,  
Mphasis, Bengaluru-560 078  
9880932485  
akolhar@yahoo.com

2. Mr. Kottur, Vice-President,  
Wipro Technologies,  
9845598730  
prabhunandayya.kotur@wipro.com

3. Dr. Punitha  
Data Scientist, IBM, Bengaluru  
9980989800  
[punithaswamy@gmail.com](mailto:punithaswamy@gmail.com)

4. Mr. Pradeep G.  
Vice President  
pradeep@fice.in  
9980136933

**Co-Opted Members:**

Name of the Person	Position	Signature
Prof. Sathish G. C.	Member	
Prof. Venkatesh Prasad	Member	
Dr. Shilpa Choudhary	Member	

**Agenda-1:** M. Tech in Computer Science and Engineering-Full Time, MTech in Data Engineering and Cloud Computing- Full Time with New Schemes.

**Proposal:** Approval of new Scheme and Syllabus of M. Tech in Computer Science and Engineering - Full Time, M. Tech in Data Engineering and Cloud Computing- Full Time for 2017-19.

**Ref:** Annexure dated 28/01/2017.

**Resolution:** Members of Board of Studies went through the Scheme and Syllabus of

- i) M. Tech in Computer Science and Engineering –Full time and
- ii) M. Tech in Data Engineering and Cloud Computing full time for 2017-2019.

The members of the Committee had a detailed discussion and finally ratified the Scheme and syllabus of both the programmes.

M.Tech CSE-FT

MTCS17F1100	Advanced Database Management Systems - 95%
MTCS17F1300	Machine Learning and Deep Learning - 90%
MTCS17F1420	Advanced Storage Area Networks - new
MTCS17F1430	Statistical Data Modeling and Analysis - new
MTCS17F1510	Image Processing - 25%
MTCS17F1520	Mobile Application development - 100%
MTCS17F1530	Agile Software Development- 100%
MTCS17F1610	Python Programming - 25%
MTCS17F1620	Robotics-new
MTCS17F2100	Principles of Algorithm Design (DAA) - 100%
MTCS17F2200	Big Data and Analytics Using R -100%
MTCS17F2300	Internet of Things - 99%
MTCS17F2410	Computer Network Engineering - 95%
MTCS17F2420	Research Methodology - new
MTCS17F2430	Open Source Cloud Computing Tools - new
MTCS17F2510	Unix Operating System & Internals - new
MTCS17F2520	Cyber Security -new
MTCS17F2530	Advanced Java Programming - new
MTCS17F2610	Parallel Computing and Programming - new
MTCS17F2620	Human Computer Interaction (UI/UX Design) - new
MTCS17F2630	Embedded Computing Systems - new
MTCS17F3110	Text and Web Mining- new
MTCS17F3120	Soft Computing- new
MTCS17F3130	Wireless Networks- new

M.Tech DECC

MTDE17F1100	Machine Learning and Deep Learning - 100%
MTDE17F1200	Cloud Computing - new
MTDE17F1300	Data Mining Techniques - new
MTDE17F1410	Statistical Data Modelling and Analysis - new
MTDE17F1430	Robotics- new
MTDE17F1510	Python Programming - 30%
MTDE17F1520	Mobile Cloud Computing- new
MTDE17F1530	Mobile Application Development- new
MTDE17F1610	Cloud Data Management- new
MTDE17F1620	Advanced Storage Area Networks-25%
MTDE17F1630	Agile Software Development- new
MTDE17F2100	Predictive Analytics using R- new
MTDE17F2200	Big Data and Hadoop- new
MTDE17F2410	Internet of Things- new
MTDE17F2420	Research Methodology- new
MTDE17F2430	Data Analytics using Rapid Miner- new
MTDE17F2510	Cyber Security- new
MTDE17F2520	Cloud Architectures - 85%

MTDE17F2530	Open Source cloud Computing tools- new
MTDE17F2610	Healthcare Analytics- new
MTDE17F2620	Human Computer Interaction (UI/UX Design)- new
MTDE17F2630	Advanced Java Programming- new
MTDE17F3110	Soft Computing- new
MTDE17F3120	Wireless Networks- new
MTDE17F3130	HR Analytics- new
MTDE17F3200	Health Care Analytics - new

**Agenda -2:** Scheme and Syllabus of B. Tech in Computer Science and Engineering from first year to final year for the batch 2017-21.

**Proposal:** Approval of continuation of Scheme and Syllabus of B. Tech in Computer Science and Engineering from first year to final year which was approved in BOS/CIT/BCS/2014-15/3/14-03-2015 for the batch 2017-21.

With changes in the following subjects of first year, 2017-21 batch :

- i) Replacement of Basic Electrical Engineering lab and Workshop Practice (BTEW16F1900) of first year with Basic Electrical Engineering lab (BTEE16F1900).
- ii) Replacement of Communicative English (BTCE15F1700) with Technical English I (BTCE17F1700) of first year.
- iii) Replacement of Technical Communication and documentation (BTTC15F2600) with Technical English II (BTTC17F2600) of first year.

**Resolution:** The members of BoS went through the Scheme and Syllabus of B. Tech in Computer Science and Engineering from first year to final year, which was approved in BOS/CIT/BCS/2014-15/3/14-03-2015 for the batch 2017-21 and approved the continuation of the same for 2017-21 along with the changes in the above mentioned subjects .

The syllabus of above changed courses are appended in Annexure II.

**Agenda-3: Open Elective for 7<sup>th</sup> semester, BTech for 2017-18.**

**Proposal: Approval of Open Elective for 7<sup>th</sup> semester, BTech for 2017-18.**

**Open Electives for UG:**

- a. Data Structures Using C
- b. Internet Computing and Applications

**Open Electives for PG:**

Introduction to Cloud Computing and Data Science

**Resolution:** Members of Board of Studies went through the syllabus of all the above open electives and decided to offer “Data Structures using C” and “Internet Computing & Applications” for BTech programme and “Introduction to Cloud Computing and Data Science” for MTech as the open elective for 2017-18.

The syllabus of above open elective courses are appended in Annexure III

**Agenda-4** M.Tech in Computer Science & Engineering- Part Time with Schemes approved in BOS/CIT/PCN/2015-16/4/02-04-2016 and BOS/CIT/PCS/2015-16/4/02-04-2016 for 2017-18

**Proposal: Continuation** of Scheme and Syllabus M.Tech in Computer Science & Engineering- Part Time with Schemes and syllabus approved in BOS/CIT/PCN/2015-16/4/02-04-2016 and BOS/CIT/PCS/2015-16/4/02-04-2016 for 2017-18 also.

**Resolution:** Members of Board of Studies went through the M. Tech in Computer Science & Engineering- Part Time for 2017-2018.

The members of the Committee had a detailed discussion and finally ratified the Scheme and syllabus of both the programmes.

**New Scheme of above program is appended in Annexure IV**

#### **M.Tech CSE-PT**

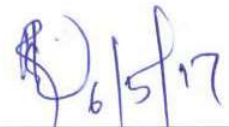

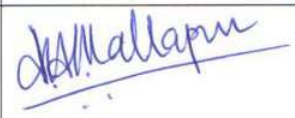
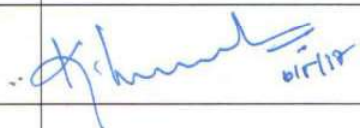

MTCS17P1100	Advanced Database Management Systems
MTCS17P1300	Machine Learning and Deep Learning
MTCS17P2100	Principles of Algorithm Design (DAA)
MTCS17P2200	Big Data and Analytics Using R
MTCS17P2300	Internet of Things
MTCS17P3120	Advanced Storage Area Networks
MTCS17P3130	Statistical Data Modeling and Analysis
MTCS17P3210	Image Processing
MTCS17P3220	Mobile Application development
MTCS17P3230	Agile Software Development
MTCS17P3310	Python Programming
MTCS17P3320	Robotics
MTCS17P4110	Computer Network Engineering
MTCS17P4120	Research Methodology
MTCS17P4130	Open Source Cloud Computing Tools
MTCS17P4210	Unix Operating System & Internals
MTCS17P4220	Cyber Security
MTCS17P4230	Advanced Java Programming
MTCS17P4310	Parallel Computing and Programming
MTCS17P4320	Human Computer Interaction (UI/UX Design)
MTCS17P4330	Embedded Computing Systems
MTCS17P5110	Text and Web Mining
MTCS17P5120	Soft Computing
MTCS17P5130	Wireless Networks



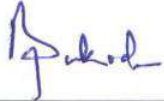
**NOTE:** The syllabi of some subjects are revised on the basis of feedback taken from stakeholders.

## Proceedings (Minutes) of the Combined BOS Meeting

Proceedings of the 5<sup>th</sup> meeting of the Combined Board of Studies (BOS) in School of Electronics & Communication Engineering held on 6<sup>th</sup> May 2017 at 10.00 AM in the School of Electronics & Communication Engineering, REVA University, Rukmini Knowledge Park, Yelahanka, Bangalore - 560 064.

### Members Present:

Sl. No.	Name and Affiliation	Status	Signature
1	Dr. R C Biradar Director, School of ECE, REVA University, Bangalore.	Chair Person	
2	Dr. Rathna G. N. Principal Research Scientist, E&E Dept., IISc. Bangalore.	Member	
3	Dr. Kasi Rajgopal Prof. Dept. of EE, IISc, Bangalore.	Member	
4	Dr. C. P. Ravikumar Technical Director, Texas Instruments, Bangalore.	Member	— ABSENT —
5	Mr. Hemanth Mallapur Saankhya Labs Pvt. Ltd Co Founder & VP Engg, Bangalore.	Member	
6	Prof. Shivashankaran K. HOD, MNE, VIT, Vellore.	Member	
7	Mr. Rajakrishnamoorthy Director, Cognizant, Bangalore.	Member	— ABSENT —
8	Dr. Bharathi S. H. Professor, School of ECE, REVA University, Bangalore.	Member	

9	<b>Dr. Geetha D.</b> Professor, School of ECE, REVA University, Bangalore.	Member	
10	<b>Dr. Venkata Siva Reddy</b> Professor, School of ECE, REVA University, Bangalore.	Member	
11	<b>Dr. P. I. Basarkod</b> Professor, School of ECE, REVA University, Bangalore.	Member	

**Invited Members:**

Sl. No.	Name and Affiliation	Status	Signature
1	<b>Dr. S. Y. Kulkarni</b> Vice Chancellor, REVA University, Bangalore.	Invited Member	
2	<b>Dr. Hanumagowda</b> Professor. Mathematics, REVA University, Bangalore.	Invited Member	
3	<b>Prof. S. Bharathi Devi</b> Prof. Physics, REVA University	Invited Member	
4	<b>Dr. Madhusudana Reddy M. B.</b> Assoc. Prof. Chemistry, REVA University, Bangalore.	Invited Member	
5	<b>Dr. Mrinal Sarvagya,</b> Professor, School of ECE, REVA University, Bangalore.	Invited Member	
6	<b>Dr. G Seshikala</b> Professor, School of ECE, REVA University, Bangalore.	Invited Member	

(Note: Signature of all the members present to be obtained against the name of each member.)

### Members Absent:

Sl. No.	Name and Affiliation	Absent Status
1	Dr. C. P. RAVIKUMAR	<del>ABSENT</del>
2	MV. RAJA KRISHNAMOORTHY	<del>ABSENT</del>
3	_____	_____

### PROCEEDINGS

At the outset, Dr. R. C. Biradar, the Chairperson of the BOS in Electronics & Communication Engineering, welcomed all the members present and introduced all the panel members. Chairman had also explained the purpose of the meeting and the agenda in brief. Then the agenda was taken up for discussion.

The Chairperson explained briefly about the establishment of REVA University and the course(s) being introduced under REVA University. He also explained the features of CBCS/CAGP of education the University is committed to follow since its inception itself. He appraised the Credit System followed in B. Tech. & M. Tech. courses.

#### Agenda - 1:

**Review of Scheme of Instructions and Syllabus of VII & VIII Semester and ratification of syllabus for I semester to VI semester for B. Tech. ECE Program:**

The Chairperson explained the Scheme of instructions and Syllabus of VII & VIII Semester and syllabus for I semester to VI semester for B. Tech. ECE program and requested the BOS to review the above said schemes.



### **Resolution:**

The Chairperson explained the proposed Scheme of Instructions and Syllabus of the following:

1. Review of I & II semester.
2. Review of III to VII Semester. and
3. Ratification of VII & VIII Semester as per discussion.

for B. Tech. Electronics & Communication Engineering Program in detail. The BOS members discussed the agenda in detail and suggested some modifications to incorporate as per **Annexure I**.

Based on the suggestions from BoS chair person, members & stake holders' feedback, the revisions are incorporated in syllabus. BoS chairperson has authorized to have 20% changes in curriculum.

### **Agenda -2a:**

#### **Review of Scheme of Instructions and Syllabus of III & IV Semester M. Tech. Digital Communication & Networking:**

The Chairperson explained the proposed Scheme of Instructions and Syllabus of III & IV Semester M. Tech. DCN & M. Tech. VLSI & Embedded Systems Programs. The BOS members discussed the agenda in detail and suggested some modifications to incorporate.

### **Resolution:**

The Board considered the proposal and unanimously resolved to recommend some changes in Scheme of Instructions and Syllabus of III & IV Semester M. Tech. Digital Communication & Networking Program as in **Annexure II**

### **Agenda -2b:**

#### **Revision of Scheme of Instructions and Syllabus of I to IV Semester M. Tech. VLSI & Embedded Systems (Full Time & Part Time):**

### **Resolution:**

New proposal has been proposed by Director and it is approved by BOS with some modifications as per **Annexure III & IV** respectively.

**Agenda -3:**

**Nomination of Panel of Board of Examiners (BOE) - Internal and external:**

The Chairperson requested the Board Members to prepare the Panel of Examiners for UG and PG Courses.

**Resolution**

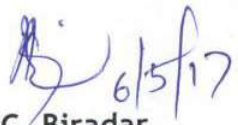
The Board prepared the panel of Examiners (internal and external) for UG & PG Courses and resolved to recommend to the University, the said panel. The Board also decided to send the panel of examiners to the Registrar (Evaluation) directly as in **Annexure V**.

**Agenda - 4:**

**Any other matter with the permission of the chair:**

**-Nil-**

At the end, the Chairperson thanked all the members for having spared their valuable time and extended their cooperation.

  
6/5/17  
**Dr. R. C. Biradar**  
**BOS Chairman, ECE**

Proceedings of the meeting of the Board of Studies in Architecture, REVA University, held on 3<sup>rd</sup> May, 2017 at 11.00 am in the Conference Hall, Administrative Block, REVA University, Kattigenahalli, Yelahanka, Bangalore-560064.

**Members Present:**

1. Ar. Dinesh Verma (Chairperson)
2. Ar. Jagadeesha Chandra B.S. (Member Convener)
3. Ar. Jaisim Krishnarao ( Member)
4. Ar.H. C. Thimmaiah (Member)
5. Ar.Bindumadhav (Member)
6. Ar.Anantharaman (Member).
7. Ar. Vidhyadhar Wodeyar (Member)
8. Dr. Ramaling Reddy (Member)
9. Dr. Vimala Swamy (Member)
10. Ar. Vidya Srikanth (Member)
11. Ar. Shubhi Sonal (Member)

**Members Absent:**

1. Ar. Abhay Zachariah


**Proceedings**

At the outset, Ar. Dinesh Verma, Chairperson of the BoS in Architecture welcomed all the members present and explained the purpose of the meeting and the agenda in brief. Then the agenda was taken up for discussion.

**Agenda 1:**

**Preparation / Modification of Course Curriculum of B Arch Program**

The Chairperson explained briefly about the establishment of REVA University and the course(s) being introduced under REVA University. He also explained the features of CBCS/CAGP of education the University is committed to follow since its inception itself. He

  
02/07

SCHOOL OF ARCHITECTURE, REVA UNIVERSITY

BOS MEETING, DATED 3<sup>RD</sup> MAY, 2017

**Minutes of meetings**

General comments

1. Photo documentation and report on previous semester works done by students.
2. Photo documentation and report of workshops/ seminars/ site visits/ guest lectures conducted by school or attended by the school.
3. Photo documentation and report of achievements of the School
4. Newsletter to be sent to all BOS members
5. Detailed report of the academic process, steps taken to improve classes, innovative methods used in classes, output of these methods, implications of these outputs on syllabus
6. Appreciation of change in evaluation pattern- SEE to VV
7. School to be member of professional bodies
8. Talks to be conducted for all semesters according to the requirement of the respective semesters
9. Peer reviewing of students work by themselves

**5<sup>TH</sup> SEM SCHEME AND SYLLABUS**

1. Architectural Design- V: minor project- no need to specify the roof forms to be used.
2. Building construction Materials-V: Need to do a comparative study of BCM of all semesters and to be linked to Structures and Architectural Design.
3. Climatology –II- the name to be changed to Energy efficient architecture/ Sustainable design/ Environmental design
4. Services-II Electrical- Electrical drawings to be done for previous semester design drawings, Building Safety measures instead of Fire safety in Buildings
5. NBC to be added to the reference list
6. Structures V- only the concepts to be taught instead of designing of elements
7. CAD-II : no need to mention any particular software.
8. Contemporary architecture: no need to mention architects name. The topics can be classified based on time period or a region
9. Vacation assignment- Can be evaluation of Study tour/ summer internships/ study of any built spaces/ photography etc.
1. Estimation and Costing to be introduced in the 3<sup>rd</sup> year

**6<sup>TH</sup> SEM SCHEME AND SYLLABUS**

1. Architectural design VI- Any large project in a hilly contour
2. Building construction Materials VI- Working drawing of a building from previous semester design to be done.  
BCM , AD , Services and Structures to be integrated

3. Value education to be removed from the syllabus
4. Sociology and Economics- no changes
5. Structures VI- Steel trusses to be included in 3<sup>rd</sup>Sem
6. Landscape Architecture- no changes
7. Elective- no changes

Syllabus approved for Sem 5 and 6 for 2015 batch

Based on feedback from all stakeholders, the following syllabi were approved with revisions-

1. Sem 3 and 4 for 2016 batch
2. Sem 1 and 2 for 2017 batch

Sno	Name of course	Topic added	Topic deleted	
<b>Comparison of 2016 batch approved syllabus( sem 3 and 4) with 2015 batch syllabus</b>				
	*Architectural Design – III	Detailing of any building space with emphasis on openings, structural framework, materials etc		
	*Building Construction materials – III	Doors and window, Plastics, floor finishes		
	*Architectural Graphics– III			
	Theory of Design - II		Named examples of architects, Organic Architecture, European Modern Architecture, Influence of other visual arts on Architecture, Architectural Criticism;, DESIGN LOGIC Contemporary Significant Theory: Research oriented: Architectural thought	
	Structures – III		Lintel and arches; Upper floors – timber flooring, flag stone floors, Jack arch floor, RCC slab flooring, RCC beam and slab flooring, green roofing	
	Environment studies	Arch examples added for community awareness, Landuse matrix, carbon footprint, ecological footprint, Report writing		
	Constitution of India			

	Vacation Assignment:	Study tour, entrepreneurship, summer course		
	South India	Buddhist architecture		
	North India	Buddhist architecture		
	South east Asia	Buddhist architecture		
	*Architectural Design – IV	Rural documentation, design for commercial/ retail use	Design of a group of building and ancillary, set in the context studied in ADS-2a.  Exploration of light quality in spaces for study and interaction  Introduction to concepts of shared open space, clustering, community, aggregation and economy	
	*Building Construction Materials – IV	Pre engineered buildings	<b>Floor finishes,</b> Rolling shutters, Steel doors, collapsible door,	
	*Climatology - I			
	Building Services – I			
	Structures – IV	Slabs	Foundation, joints, staircases	
	Surveying and Leveling - I			
	Computers – I			
	Contemporary arch-Indian	New course replacing modern architecture		
	Contemporary arch-Europe & other countries	New course replacing modern architecture		
	Contemporary arch-United States	New course replacing modern architecture		
<b>Comparison of semester 1and 2 (2017 batch) new approved syllabus with 2016 batch sem 1 and 2</b>				
S.NO	Name of Course	Topic added in 2017	Topic deleted in 2016	
	<b>Sem 1&amp;2</b>			
	<b>ARCHITECTURAL DESIGN I</b>	1. Learning importance of line types, characteristics and qualities of line types. Working in layers of each Element until all layers are incorporated		

		<p>into a single composition.</p> <p>2. Introducing Principles of Design: Balance, proportion, scale, Unity, Variety, Emphasis, contrast, Pattern, Gradation, Dynamism, Positive and Negative</p> <p>3. Work in small groups with variety in Materials and mediums</p> <p>4. Work with life size models and compare Indian adaptations and scale with Standards. Erecting a structure to Human scale to understand volume and its relation to anthropometry.</p> <p>5. Ideating and executing the design in Groups</p> <p>6. views with an exercise in Measure drawing. Single function space in the immediate environment like Hostel room and toilet or room and toilet at their residence. Individual work</p> <p>7. additions/extensions to a built space</p> <p>8. Student should learn to develop more than one solution to the design and learn the process of selection /elimination. Thought to be given to materials</p> <p>9. Importance to be given to understand basics in the representations: Plinth, levels, Entrance porch, sill, lintels, parapets etc. that is learnt in Building construction.</p>		
	<b>BUILDING CONSTRUCTIONS MATERIALS I</b>	<p>1. Basics of sheets composition. Understanding Line</p>		

		<p>weights</p> <p>2. Dressing of Stone, application in Building Industry, methods of Pointing</p> <p>3. Piers and Abutments</p> <p>4. Understanding support system of Centering, Scaffolding,</p> <p>5. Clay, mud and lime as mortar, Tiles, roof covers</p> <p>6. Wooden roofs (flat, sloping): Simple pitched roof, lean to, close collar and couple close roofs with Types of roof trusses, detail study of king post truss and queen post truss</p> <p>7. Regular site visits to construction sites and buildings to understand the practical implication of theoretical inputs.</p> <p>8. sketch book and models to be prepared</p>		
	<b>ARCHITECTURAL GRAPHICS I</b>			
	<b>HISTORY OF ARCHITECTURE I</b>		1. Detailed examples removed	
	<b>FINE ARTS AND APPLIED ARTS I</b>		<ul style="list-style-type: none"> <li>• monochrome washes to suit trees, building and complete landscape</li> <li>• Sketching views of built forms, vegetation, human figures, vehicles etc. measurement, shading, materials</li> </ul>	
	<b>STRUCTURES - I</b>			
	<b>COMMUNICATION SKILLS</b>			
	<b>ARCHITECTURAL DESIGN II</b>		<ul style="list-style-type: none"> <li>• study activity flow, interview users – analyze and interpret data – form guidelines for design</li> <li>• Concept development based on biomimicry/ organic</li> </ul>	



			architecture- Nature as an inspiration	
	<b>BUILDING CONSTRUCTION &amp; MATERIALS II</b>		<ul style="list-style-type: none"> <li>• bay window, corner window, clerestory, lantern window, dormer window, skylights</li> <li>• Wooden roofs (flat, sloping) and floors: Simple pitched roof, lean to, close collar and couple close roofs with Mangalore tile finish and country tile, butter sections. Types of roof trusses, detail study of king post truss and queen post truss.</li> </ul>	
	<b>HISTORY OF ARCHITECTURE II</b>		<ul style="list-style-type: none"> <li>• Birth and spread of Christianity – transformation of the Roman Empire – early Christian worship and burial. Detailed examples removed.</li> </ul>	
	<b>THEORY OF DESIGN - I</b>			
	<b>STRUCTURES-II</b>			
	<b>ARCHITECTURAL GRAPHICS - II</b>			
	<b>FINE ARTS / APPLIED ARTS II</b>	<ul style="list-style-type: none"> <li>• Surface development using paper</li> <li>• Geometrical shapes in varied materials. Choose from materials such as clay,</li> <li>• Exercises involving creating small study models for architectural projects, understanding of scale, material usage for various elements such as building components (walls/ openings /staircase/ roofing), furniture etc. Usage of conventional model making materials</li> </ul>	<ul style="list-style-type: none"> <li>• carving the plaster block</li> <li>• Exercises to provoke the thought process in them</li> <li>• Character modeling by SCULPTRIS, to explore more on mouldingshapes digitally</li> </ul>	

		<p>such as mount board, paper, foam board, balsa wood etc.</p> <ul style="list-style-type: none"> <li>including buildings, site detailing on model, landscape elements, street furniture etc. Color scheme and textures for large scale architectural models. Innovative use of various model making materials to achieve the desired texture and form</li> </ul>		
	<b>ART APPRECIATION AND PHOTOGRAPHY</b>	<p>Different types of Installations &amp; its role in society. Group exercises: Installation /Sculpture</p> <p>adaptations in Art.</p> <p>Works of European Masters.</p> <p>Indian Artists – Different schools and their influences, Indian Folk art forms, influence of the vernacular in Modern architectural spaces.</p> <p>Group Exercises: Music, Dance, Literature and Architecture coming together as a production.</p> <p>Photography workshops to understand Indoor and outdoor photography.</p>	<ul style="list-style-type: none"> <li>Advertising and Architecture</li> </ul>	

The Chairman thanked all the members of Board of Studies in Architecture for their active participation during the proceedings of the meeting and concluded the meeting.

Sd/-

**Chairman**

**Board of Studies in Architecture**



## Proceedings (Minutes) of the BOS Meeting

**School:** Computer Science & Applications

**Faculty of:** Science and Technology

**Proceedings of the meeting of the Board of Studies in Computer Science and Applications held on Friday, 2<sup>nd</sup> June 2017 from 10.00 a.m. to 12.30 p.m. in the Conference Room of Placement office, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bengaluru – 560064.**

**CHOICE BASED CREDIT SYSTEM (CBCS) AND CONTINUOUS  
ASSESSMENT GRADING PATTERN (CAGP)**

**June 2017**

## Esteemed External BOS Members

Sl. No	Name	Role	Designation, Affiliation, Address & Contact Number
1.	Dr. Evangeline Geetha	Member (Academics)	Professor Department of MCA M.S Ramaiah Institute of Technology, Bangalore. Ph : 9620293370 Mail : devangelin@gmail.com
2.	Mr.Ambareesha Arunagiri	Member (Industry)	Command centre operations Manager- IBM, Manyata Embassy Park, G1, Bangalore Ph: 080-43032139 Mail:amby.arunagiri@in.ibm.com
3.	Mr.RajaKrishnamoorthy	Member (Industry)	Director, Cognizant Technologies, Bangalore. Ph: 8861204050 Mail : rajakc@gmail.com
4.	Dr. Pethuru Raj	Member (Industry)	Pethuru Raj PhD Chief Architect, Reliance Jio Cloud Services (JCS) SARGOD Imperial, 23, Residency Road Bangalore 560025, India Cell Number 8660697438

Sl.No	Name	Role	Affiliation
1.	Dr. S. Senthil	Chairperson	Director School of Computer Science and Applications REVA University
2.	Dr. Vinayaka Murthy	Member (Academics)	Professor School of Computer Science and Applications, REVA University
3.	Prof. Vijaylaxmi K.	Member (Academics)	Associate Professor School of Computer Science and Applications, REVA University
4.	Prof. D.Revina Rebecca	BOS Co-ordinator	Associate Professor School of Computer Science and Applications, REVA University
5.	Prof. Lokesh C.K	Member (Academics)	Associate Professor & Programme Co-ordinator(BCA) School of Computer Science and Applications, REVA University
6.	Dr. Rajeev Ranjan	Member	Associate Professor School of Computer Science and Applications, REVA University
7.	Prof. ShreethaBhat	Note Taker	Assistant Professor School of Computer Science and Applications, REVA University.
8.	Prof. Deepa B G	Note Taker	Assistant Professor School of Computer Science and Applications, REVA University.
9.	Prof. Vidya.S	Note Taker	Assistant Professor School of Computer Science and Applications, REVA University.

  
**Dr.S.SENTHIL**  
 Director  
 School of Computer Science & Applications  
 REVA University, Kattigenahalli,  
 Bangalore - 560 064.

### **Esteemed Internal BOS Members**

## Attendance Sheet of External members



### 4<sup>th</sup> Board of Studies – Computer Science and Applications 2016 – 2017, External BoS Members Attendance Report

BOS Meeting Date : 02-06-2017; Time : 9.30 a.m.; Venue : Placement Conference Room

Sl. No	Name	Role	Designation, Affiliation, Address & Contact Number	Signature
1.	Dr. Evangeline Geetha	Member (Academics)	Professor Department of MCA M.S Ramaiah Institute of Technology, Bangalore. Ph : 9620293370 Mail : devangelin@gmail.com	 02/06/17
2.	Dr. Suchithra Suriya	Member (Academics)	Professor Department of Computer Science and Applications Jain University Bengaluru Ph: 9980680442 Mail: suchithra.suriya@gmail.com	NOT ATTENDED
3.	Mr.Ambareesha Arunagiri	Member (Industry)	Command centre operations Manager-IBM, Manyata Embassy Park, G1, Bangalore Ph: 080-43032139 Mail:amby.arunagiri@in.ibm.com	 2/6/17
4.	Mr.Raja Krishnamoorthy	Member (Industry)	Director, Cognizant Technologies, Bangalore. Ph: 8861204050 Mail : rajakc@gmail.com	
5.	Dr. Pethuru Raj	Member (Industry)	Chief Architect, Reliance Jio Cloud SARGOD Imperial 23, Residency Road Bangalore 560025 Ph: 8660697438 Mail : peterindia@gmail.com	

## Attendance Sheet of Internal members



### 4<sup>th</sup> Board of Studies – Computer Science and Applications 2016 – 2017, Internal BoS Members

#### Attendance Report

BOS Meeting Date : 02-06-2017; Time : 9.30 a.m.; Venue : Placement Conference Room

Sl. No	Name	Role	Affiliation	Signature
1.	Dr. S. Senthil	Chairperson	Director, School of Computer Science and Applications, REVA University	<i>S. Senthil</i> 2/6/17
2.	Dr. M. Vinayaka Murthy	Member	Assistant Director, Research and Innovation REVA University	<i>M. Vinayaka Murthy</i> 2/6/17
3.	Dr. Rajeev Ranjan	Member	Associate Professor School of Computer Science and Applications REVA University	<i>Rajeev Ranjan</i> 2/6/17
4.	Mrs. Vijaylakshmi.K	Member	Associate Professor School of Computer Science and Applications REVA University	<i>Vijaylakshmi.K</i> 2/6/17
5.	Mrs. D. Revina Rebecca	BOS Co-ordinator	Associate Professor School of Computer Science and Applications REVA University	<i>D. Revina Rebecca</i> 2/6/17
6.	Mr. Lokesh C.K	Member	Associate Professor & Program Co-coordinator(BCA), School of Computer Science and Applications REVA University	<i>Lokesh C.K</i> 2/6/17
7.	Mrs. B.G. Deepa	Note Taker	Assistant Professor School of Computer Science and Applications REVA University	<i>B.G. Deepa</i> 02/06/17
8.	Mrs. Vidya	Note Taker	Assistant Professor School of Computer Science and Applications REVA University	<i>Vidya</i> 2/6/17
9.	Mrs. Shretha Bhat	Note Taker	Assistant Professor School of Computer Science and Applications REVA University	<i>Shretha Bhat</i> 02/06/2017

## Proceedings

At the outset, Dr. S.Senthil, the Chairperson, of BOS in Computer Science and Applications welcomed all the members present, explained the purpose of the meeting and the agenda in brief. Then the main agenda of the meeting, **Preparation / Modification of Scheme of instructions and syllabus of concerned PG & UG programs** was taken up for discussion.

The following agenda was taken for discussion:

### Agenda:

1. **Preparation /Modification of Scheme of instructions and syllabus for MS(Master of Science) in Computer Science**
2. **Introduction of a new P.G programme M.S(Master of Science) with specialization in Data Science and Analytics**
3. **Modification of Syllabus for few courses in BCA programme.**
4. **Any other matter with the permission of the chair.**

### **Agenda 1: Preparation /Modification of Scheme of instructions and syllabus for MS (Master of Science) in Computer Science**

The BOS Coordinator briefed about the M.S(Master of Science) in Computer Science Programme. This is a 2 year program. The students who have completed BCA, BE(CS), B.Sc(Computer Science) are eligible to do this programme. The scheme and syllabus of the MS programme of REVA University needed to be refined based on current market trends. So the scheme and syllabus was reviewed and was refined by the Internal BOS members. BOS Coordinator requested all the members for their co-operation in approving the revised course curriculum for M.S(Master of Science) in Computer Science as per the REVA University Regulations for CBCS-CAGP for UG / PG programs/ Diploma programs. The BOS members discussed the changes made to the syllabus content in detail.

### **Resolution**

- The Board approved The Scheme and syllabus of this new programme M.S(Master of Science) Programme with specialization in DataScience and Analytics
- Few minor changes were suggested by the BOS members.\*
- The Modified Scheme for the candidates to be admitted during 2017-2018 is given in **Appendix-MS-CS-June2017**.
- The Modified Syllabus for the candidates to be admitted during 2016-17 is given in **Annexure MS-CS - June 2017**.

**\*all these changes are almost incorporated in the syllabus.**

**\*all these changes are almost incorporated in the syllabus.**

**Agenda 3: Modification of Syllabus for few courses in BCA programme.**



**Resolved to do few changes in the following courses in BCA**

- i) Course : Data Warehousing and Data Mining with Code: BPAL15F5200
- ii) Course : Data Analytics with Code BPAL15F5600

**Changes Suggested by BOS members****MASTER OF SCIENCE IN DATA SCIENCE AND ANALYTICS**

<b>FIRST SEM</b>		
<b>Sl. No</b>	<b>Course Title</b>	<b>Changes Recommended</b>
1.	Multivariable Calculus	No Changes
2.	Object Oriented Programming with Java	OOPS concepts to be included
3.	Data Mining and Knowledge Discovery	Add WEKA Tools
4.	Big Data Management	Include some tools
5.	Probability & Statistics	No Changes
6.	Introduction to Web Technologies	→ Remove XML → Introduce JSON, Node.JSON, Angular.JSON, embed.JSON → More emphasis on Java script.
	Artificial Intelligence & Intelligent Agents	Paper not relevant, can be removed
	Information Storage Management	SQL and PL/SQL can be added
<b>SECOND SEM</b>		
1.	Machine Learning Algorithms	No Changes
2.	Data Analytics using Python	Suggested to recheck on the topic Pandas
3.	Cloud Computing	Tool called Software Defined Cloud to be included.
4.	Big Data & NoSQL	Include Graph Databases
	Social Network Analytics	Can include lab component
	Big Data Security	Title can be changed to Data Security

5.	Pattern Recognition	Text Book in reference , should include year of publication
	Bioinformatics	Latest edition of reference books has to be included
	Natural Language Processing	Find books from google, google for Cognitive science
6.	IoT	<ul style="list-style-type: none"> <li>→ In Unit II replace with Domain specific IoT Usecases</li> <li>→ Practical sessions to be included</li> <li>→ Include IoT design methodology</li> </ul>
	Deep Learning	Reference Books need to be searched for, modifications in the text books recommended.
<b>THIRD SEM</b>		
No Comments		

  
**Dr.S.SENTHIL**  
 Director  
 School of Computer Science & Applications  
 REVA University, Kattigenahalli,  
 Bangalore - 560 064.

**REVA University**  
**School of Applied Sciences (Biochemistry) Proceedings**  
**of Board of Studies Meeting**

**Date: 30<sup>th</sup> May 2017**

The meeting of the Board of Studies in School of Biochemistry was held on 30/05/2018 at 10.30 am to discuss on **the revision of PG (MSc. Biochemistry) syllabus of 2017 batch programs.**

At the outset, the Dr. Jayashree S, Chairperson of the BOS in Biochemistry welcomed all the members present, explained the purpose of the meeting and the agenda in brief. Then, the agenda was taken up for discussion.

The Proceedings of the meeting are as below:

**Agenda:** Approval of Scheme & Syllabus of 2017-19 M.Sc. Biochemistry program.

**Resolution:** The committee members went through the scheme and detailed syllabus of M.Sc. Biochemistry program for the batch 2017-19 and ratified the same with the following modifications.

**M.Sc. Biochemistry**

1. The committee recommendations for **I-Semester** are the following
  - a) No changes for MS17BC101 and MS17BC103
  - b) Cell Biology of MS17BC102 removed and replaced with General Physiology
  - c) MS17BC104 is revised with addition of sample preparation and extraction methods and discussing spectroscopic and microscopic techniques.
  - d) Introduced MS17BC105 Biomolecules additional new course/subject/paper
  - e) Introduced Enzymology Laboratory III and Microbiology Laboratory IV
2. The committee experts suggested following for **II-Semester**
  - a) Introduced MS17BC204 Biochemical Genetics as a additional new course/subject/paper
  - b) Introduced Molecular Biology (MS17BC207) and Bioinformatics ( MS17BC209) as new practical / laboratory courses

- c) Also added two new soft cores Food Technology (MS17BC215) and Bioinformatics (MS17BC225)
  - d) Addition of animal cell culture and sequencing methods were shuffled from Advanced Molecular Biology to Introduction of Biotechnology (MS17BC202)
3. The expert committee advised no changes to **III-Semester**
4. Members of the committee advised the below for **IV-Semester**
- Introduction of laboratory course MS17BC402

The detailed syllabus of M.Sc courses has been attached as Annexure I.

**Chairman**  
School of Applied Sciences (Biochemistry)  
REVA University.



Sl.No	Name of the Member	Designation
1	Dr. N.Ramesh Dean, Faculty of Science and Technology REVA University <a href="mailto:dir.planning@reva.edu.in">dir.planning@reva.edu.in</a>	Chairman
2	Dr. Raghavendra P.B. Director, School of Chemical and Biological Science <a href="mailto:raghavendrappb@reva.edu.in">raghavendrappb@reva.edu.in</a>	Member
3	Prof. Veeraraghavan Professor, , School of Biochemistry <a href="mailto:Veera.raghavan@revainstitution.org">Veera.raghavan@revainstitution.org</a>	Member

4	Prof. Jayashree.S School of Biochemistry <a href="mailto:jayashree@revainstitution.org">jayashree@revainstitution.org</a>	Member
5	Dr. V.R. Devaraj, Professor, Department of Biochemistry, Bangalore University <a href="mailto:devaraj@bub.ernet.in">devaraj@bub.ernet.in</a>	Member
6	Dr. Renuka Srihari, Professor, Department of Biochemistry, MLACW, Bangalore <a href="mailto:rsh1-thesis@rediffmail.com">rsh1-thesis@rediffmail.com</a>	Member
8	Dr. U.V Babu, Head- Phytochemistry, Research and Development, Himalaya Drug Company, Yeshwantpur, Bangalore. <a href="mailto:dr.babu@himalayawellness.com">dr.babu@himalayawellness.com</a>	Member



REVA UNIVERSITY

SCHOOL OF PERFORMING ARTS

BOS MEMBERS-2017-2018

1. Dr. Vasanth Kiran - Chair Person

2. Lakshmi Vishwanathan - Member

3. Dr. Sheela Shridhar - Member

4.

5. Dr. Usha Datar - Member

6. Sathyanarayana Raju - Member

7. Prof. Maalyada Anand - Member

U.S.

Dr. Vasanth Kiran

Director

School of Performing Arts

REVA University

School of Performing Arts

REVA University

Rukmini Knowledge Park, Kattigenahalli

Yelahanka Bengaluru - 560 067

**Proceedings of the meeting of the Board of Examination in Performing Arts held on 28<sup>th</sup> September, 2017 at Conference Hall in Administrative Block, REVA University, Kattigenahalli, Yelahanka, Bengaluru - 560064.**

**Members Present:**

1. Dr. Vasanth Kiran - Chairperson
2. Lakshmi Vishwanathan - Member
3. Dr. Sheela Shridhar - Member
4. Dr. Usha Datar - Member
5. Sathyanarayana Raju - Member
6. Prof. Maalyada Anand - Member

**Members Not Present:**

1. Manju Barggavee - Member
2. Dr. Nagesh Bettakote - Member
3. Dr. Nagamani Shreenath - Member

### Proceedings

At the outset, Dr. Vasanth Kiran, Chairperson of the Board of Studies in **Performing Arts**, welcomed all the members present, explained the purpose of the meeting and the agenda in brief. Then the agenda was taken up for discussion.

#### **Agenda 1:**

#### **Requisition of students to offer Two Year MFA program instead of MFA in Kuchipudi and MFA in Bharathanatyam and preparation of Course Curriculum**

The Chairperson acknowledged the input given by the members in designing the scheme of Instruction and framing the detailed syllabus of MFA in Kuchipudi and MFA in Bharathanatyam programs and placed before the members the requisition given by the students requesting for offering Two Year MFA program instead of MFA in Kuchipudi and MFA in Bharathanatyam programs. The members examined the contents in the requisition give by the students and discussed in detail the advantages and limitations of having two separate PG programs and as well one MFA program with a

provision to study different specializations such as Kuchipudi, Bharathanatyam, Kathakali, Odissi, etc. Having discussed in detail the members resolved as under.

**Resolution:**

The members unanimously resolved to recommend to University for introduction of Two Year MFA program with different specializations as soft core courses and introduce the same in REVA University from the Academic Year 2017-18 in place of MFA in Kuchipudi and MFA in Bharathanatyam programs. The board also resolved to prepare the scheme of instruction, examination and detailed syllabus for Two Year MFA program.

**Agenda 2:**

**Preparation of Scheme of Instruction and detailed syllabus for Two Year MFA program**

The Chairperson explained the regulations relating to CBCS-CAGP adopted the University and requested the members to prepare the scheme of instruction as per the CBCS-CAGP regulations adopted by the University. The members studied the CBCS-CAGP regulations and prepared the scheme of instruction and detailed syllabus for Two Year MFA program and resolved as under.  
**(Annexure I & III)**

**Resolution:**

The members unanimously resolved to recommend to the University to adopt scheme of instruction and detailed syllabus for Two Year MFA program prepared by the Board of Studies in Fine Arts and introduce the same from the academic year 2017-18.

**Agenda 3:**

**Preparation of Scheme of Examination and Pattern of Question Papers**

The Chairperson explained the guidelines relating to scheme of examination /and pattern of question papers setting and requested the Board to work out the Scheme of Examination and decide about the pattern of question papers to be adopted to the program. Accordingly the Board went through the guidelines and prepared the Scheme of Examination for Two Year MFA program and resolved as under.

**Resolution**

The Board resolved to recommend to the University to adopt the Scheme of Examination and pattern of question papers for MFA program prepared by the BOS in Fine Arts and placed at **Annexure-II**.  
from the academic year 2017-18



**Agenda 4:**

**Preparation of Panel of Examiners**

The Chairperson requested the Board Members to propose the names of the external examiners for the 1<sup>st</sup> and 2<sup>nd</sup> Semester End Examinations of the MFA program. The board prepared the Panel of Examiners for Semester End Examinations of the MFA program and resolved as under.

**Resolution**

The members unanimously resolved to submit the panel of Examiners (internal and external) prepared and placed in a sealed cover by the BOS in Fine Arts to the Registrar (Evaluation).

**Agenda 5:**

Any other matter with the permission of the Chair

- Nil -

At the end, the Chairperson thanked all the members for having spared their valuable time and extended their cooperation.

*V.-S.-*

**Dr. Vasanth Kiran  
Chairperson  
BOS in Performing Arts  
REVA University**