PROCEEDINGS

of the

21st ACADEMIC COUNCIL MEETING

15th June 2020 – 12:00 noon

(Virtual Meeting)

REVA UNIVERSITY
Bengaluru, India
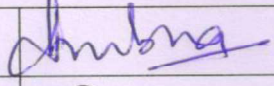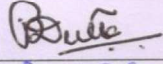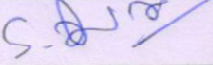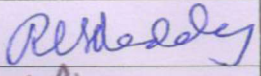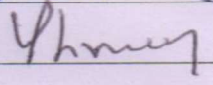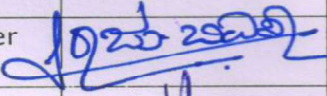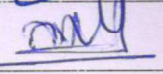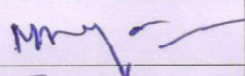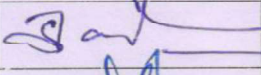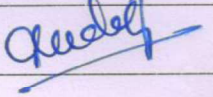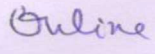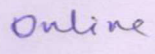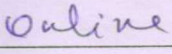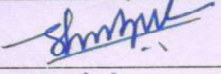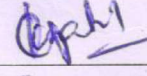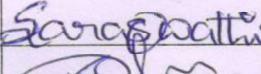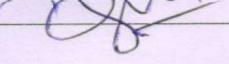
21st Meeting of the Academic Council

Date: 15th June 2020
Time: 11.00 am

Virtual Meeting

Sl. No	Name	Designation	Signature
1	Dr. S R Shankapal Vice Chancellor Incharge	Chairperson	
2	Dr. M Dhanamjaya The Registrar	Member Secretary	
3	Dr. P Ramachandra The Registrar (Evaluation)	Member	
4	Dr. DVS Bhagavanulu Dean, Planning and Development	Member	
5	**Deans of Faculties**		
(i)	Dr. Sunil Kumar Manvi, Dean of Engineering & Technology	Member	
(ii)	Dr. N Ramesh Dean, Faculty of Science and Technology.	Member	
(iii)	Dr. M. Dhanamjaya Dean, Faculty of Commerce and Management Studies	Member	
(iv)	Dr. Beena G Dean, Faculty of Arts and Humanities	Member	
(v)	Dr. Vimala Swamy Faculty of Architecture	Member	
(vi)	Dr. Bharathi.S Faculty of Law	Member	
6	**Directors of Schools**		
(i)	Dr. R C. Biradar Director, School of Electronics and Communication Engineering	Member	
(ii)	Dr. 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)	Dr. Beena.G Director, School of Applied Sciences	Member	

(xvi)	Dr. Shubha A Director, School of Commerce and Management Studies	Member	
(xvii)	Dr. Payal Dutta Choudhary Director, School of Arts & Humanities	Member	
(xviii)	Dr. S Senthil Director, School of Computer Science & Applications	Member	
(ix)	Dr.Vidya Kumari.S Director, School of Performing Arts	Member	
7	**Professors Nominated by the Vice-Chancellor**		
(i)	Dr. R.Venkata Shiva Reddy School of Electronics & Communication Engineering	Member	
(ii)	Dr. Shivananda Professor School of Civil Engineering	Member	
8	**Associate Professors**		
(i)	Dr. B.S.Raju School of Mechanical Engineering	Member	
(ii)	Dr. D.V.Sunitha School of Applied Sciences	Member	
(iii)	Dr. M.Subramanyam School of Commerce	Member	
(iv)	Dr.Jayashree S School of Applied Sciences	Member	
(v)	Dr.Madhusudhan Reddy School of Applied Sciences	Member	
9	**Eminent Persons Nominated by the Chancellor**		
(i)	Dr. Sridhar Mitta Chairman & Managing Director, Next Wealth Entrepreneurs, Bengaluru	Member	Online
(ii)	Dr V Ramachandra Vice-President (Technical), Ultra Tech Cement, Mumbai ramachandra.v@adityabirla.com	Member	Online
(iii)	Dr. Hubert Reilard, Managing Director, EFD Induction Limited, Bengaluru	Member	Online
10	Dr. B P Divakar Dean, Research and Innovation council	Member	
11	Dr. Shinu Abhi Director, REVA Academy for Corporate Excellence	Member	
12	Dr. Kiran Kumari Patil Director University Industry Interaction Centre	Member	
13	Smt. S Saraswathi, Chief Librarian	Member	
14	Sri. Deepak C S, Director-Physical Education	Member	

jhkjhkjhjlhllkj

Proceedings of the Twenty First Meeting of the Academic Council of REVA University held on 15th June 2020 at 12.00 noon through M S Teams.

Members Present:

Sl. No	Name	Designation
1	Dr. S R Shankapal Vice Chancellor –i/c	Chairperson
2	Dr. M Dhanamjaya The Registrar	Member Secretary
3	Dr. P Ramachandra The Registrar (Evaluation)	Member
4	**Deans of Faculties**	
5	Dr. Sunil Kumar Manvi, Dean of Engineering & Technology	Member
6	Dr. N Ramesh Dean, Faculty of Science and Technology.	Member
7	Dr. M. Dhanamjaya Dean, Faculty of Commerce and Management Studies	Member
8	Dr. Beena G Dean, Faculty of Arts and Humanities	Member
9	Dr. Vimala Swamy Faculty of Architecture	Member
10	Dr. Bharathi S Faculty of Law	Member
	Directors of Schools	
11	Dr. R C. Biradar Director, School of Electronics and Communication Engineering	Member
12	Dr. Ramalinga Reddy Director, School of Civil Engineering	Member
13	Dr. Rajashekar Mandi Director, School of Electrical and Electronics Engineering	Member
14	Dr. Narayanaswamy K S Director, School of Mechanical Engineering	Member
15	Dr. Beena G Director, School of Applied Sciences	Member
16	Dr. Payal Dutta Choudhary Director, School of Arts & Humanities	Member
17	Dr. Shubha A Director, School of Commerce and Management Studies	Member
18	Dr. S Senthil, Director, School of Computer Science & Applications	Member
19	Dr.Vidya Kumari.S Director, School of Performing Arts	Member
	Professors Nominated by the Vice-Chancellor	
20	Dr. Kiran Kumari Patil Director University Industry Interaction Centre	Member

21	Dr. R Venkata Shiva Reddy School of Electronics & Communication Engineering	Member
22	Dr. P Shivananda Professor School of Civil Engineering	Member
	Associate Professors	
23	Dr. B S Raju School of Mechanical Engineering	Member
24	Dr. D V Sunitha, School of Physical Science	Member
25	Dr. Subramanyam School of Commerce	Member
26	Dr. Jayashree S School of Applied Sciences	Member
27	Dr. Madhusudhan Reddy School of Applied Sciences	Member
	Persons Nominated by the Chancellor	
28	Dr. V G Talawar Advisor, REVA University	Member
	Other Officers of the University	
29	Dr. B P Divakar Dean, Research and Innovation council	Member
30	Dr. Shinu Abhi Director, REVA Academy for Corporate Excellence	Member
31	Smt. S Saraswathi, Chief Librarian	Member
32	Sri. Deepak C S, Director-Physical Education	Member
	Student Nominees	
33	Mr. Jeshwanth Reddy – M.Tech	Student Representative
34	Mr. Suprith Singh – M.Tech	Student Representative
35	Ms. Ramya - MBA	Student Representative
	Members Not Present:	
1	Dr. Sridhar Mitta Chairman & Managing Director, Next Wealth Entrepreneurs, Bengaluru	Member
2	Dr V Ramachandra Vice-President (Technical), Ultra Tech Cement, Mumbai ramachandra.v@adityabirla.com	Member
3	Dr. Hubert Reilard, Managing Director, EFD Induction Limited, Bengaluru	Member

All the members of the Academic Council unanimously resolved to approve the Calendar of Events and University Activities calendar made for the academic year 2020-21.

Amendments to REVA University Regulations for Choice Based Credit System-2020

The Vice Chancellor (in-charge) brought to the notice of the members on some of the Amendments to REVA University Academic Regulations that govern Engineering Programs (Amendments to 2017 Regulations). The changes made in the Regulation are indicated in bold italics and the same has been attached as an Annexure I

The main amendments are as follows:

1. *Assessment*

b) *Each course is assessed for a total weight of 100%. Out of the total 100% weight; 50% weight is for Continuous Internal Assessment (CIA or IA) and the remaining 50% for the Semester End Examination (SEE). This applicable for theory, laboratory, workshop, studio and any such courses*

c) *Out of 50% weight earmarked for Internal Assessment (IA)- 10% is for Quizzes, 15% for test-1, 15% for test-2 and 10% for Assignments and this is applicable for theory based courses*

d) *The quizzes, tests and assignments are conducted as per the semester academic calendar provided by the University*

 The details as given in the table

Component	Description	Conduction	Weight Percentage
C1	*Quizzess*	*At the end of each class*	*10*
C2	*Test-1: IA1*	*6th week from the starting date of semester*	*15*
	Test-2: IA2	*12th week from the starting date of semester*	*15*
C3	*1 Assignment*	*7th week*	*05*
	2 Assignment	*13 th week*	*05*
C4	*SEE including practical*	*between 17th Week-20th Week*	*50*
Results to be Announced			*By the end of 21st Week*

 Note: IA or CIA includes C1,C2, C3

Each test must be conducted for a duration of 60 minutes, setting the test question paper for a maximum of 30 marks. The final examination must be conducted for a duration of 3 hours and the question paper must be set for a maximum of 100 marks.

e) *Students are required to complete courses like communication skills, technical English, Professional ethics and Indian Constitution, Environmental Sciences, technical skills, placement related courses, Open electives and any such value addition or specialized courses through online platforms like SWAYAM/NPTEL/Any other reputed online education aggregator. Students are required to choose the courses on the advice of their course coordinator/Director and required to submit the course completion certificate along with percentage of marks/grade scored in the assessment conducted by the online education aggregator. If the online education aggregator has issued a certificate along with the grade or marks scored to students, such courses will be considered for SGPA calculations, in case the aggregator has issued only a certificate and not marks scored, then such courses will be graded through an examination by concerned School, in case, if grading is not possible, students will be given a pass grade and award the credit and the credits will not be considered for SGPA calculations. The Online/MOOCs courses will not have continuous internal assessment component*

f) *Such of those students who would like to discontinue with the open elective course that they have already registered for earning required credits can do so, however, they need to complete the required credits by choosing an alternative open elective course.*

9. *Setting question paper and evaluation of answer scripts.*

   i. *For SEE, three sets of question papers shall be set for each theory course out of which two sets will be by the internal examiners and one set will be by an external examiner. In subsequent years by carrying forward the unused question papers, an overall three sets of question papers should be managed and depending on the consumption of question papers either internal or external examiner be called for setting the question paper to maintain an overall tally of 3 papers with the conditioned mentioned earlier. The internal examiner who sets the question paper should have been course tutor*

   ii. *The Chairman of BoE shall get the question papers set by internal and external examiners.*

   iii. *The Board of Examiners shall scrutinize and approve the question papers and scheme of valuation. It is the responsibility of the BoE to see that all questions contained in the question paper are within the prescribed syllabus of the concerned course.*

   iv. *There shall be single valuation for all theory papers by internal examiners. However, there shall be moderation by the external examiner who has the subject background. In case no external examiner with subject background is available, a senior faculty member within the discipline shall be appointed as moderator.*

   v. *The SEE examination for Practical work / Field work / Project work/Internship will be conducted jointly by internal and external examiners as detailed below: However,*

the BoE on its discretion can also permit two internal examiners.

vi. *If a course is fully of (L=0):T:(P=0) type or a course is partly P type i.e, (L=3): (T=0) (P=1), then the examination for SEE component will be as decided by the BoS concerned.*

10. Evaluation of Practical's and Minor Project / Major Project / Dissertation

10.3.1. A practical examination shall be assessed on the basis of:

a) Knowledge of relevant processes;

b) Skills and operations involved;

c) Results / products including calculation and reporting.

10.3.2. In case a course is fully of P type (L=0:T=0:P=4), the performance of a candidate shall be assessed for a maximum of 100 marks as explained below:

      a) **Continuous Internal assessment (CIA) = 50 marks**

      b) **Semester end practical examination (SEE) = 50 marks**

The 25 marks for continuous assessment shall further be allocated as under (IA or CIA):

i	Conduction of regular practical throughout the semester	20 marks
ii	Maintenance of lab records	10 marks
iii	Laboratory test and viva	20 marks
	Total	50 marks

The 50 marks meant for Semester End Examination, shall be allocated as under:

i	Conduction of semester end practical examination	30 marks
ii	Write up about the experiment / practical conducted	10 marks
iii	Viva Voce	10 marks
	Total	50 marks

10.3.3. The SEE for Practical work will be conducted jointly by internal and external examiners. However, if external examiner does not turn up, then both the examiners will be internal examiners.

10.3.4. In case a course is partly P type i.e, (L=3): (T=0) (P=1), then the examination for SEE component

will be as decided by the BoS concerned.

10.3.5. *The duration for semester-end practical examination shall be decided by the concerned School Board.*

10.4. *Evaluation of Minor Project / Major Project / Dissertation:*

Right from the initial stage of defining the problem, the candidate has to submit the progress reports periodically and also present his/her progress in the form of seminars in addition to the regular discussion with the supervisor. At the end of the semester, the candidate has to submit final report of the project / dissertation, as the case may be, for final evaluation. The components of evaluation are as follows:

1	First project presentation describing the problem definition	Should be done a semester before the project semester	Weightage: 0%
2	Project Progress presentation-1	7th week from the start date of project semester	Weightage: 25%
3	Project progress presentation-2	14th Week from the start date of project semester	Weightage -25%
4	Final project Viva and Project Report Submission	17th -20th Week of project Semester	Weightage: 30% for Project Report Weightage : 20% for Final Viva Voce

Decision:

All the members agreed for the amendments made in the academic regulations governing B.Tech programs effective from academic year 2020-21 and it also applies for the existing batches of students.

Agenda - AC 21.6

Conduction of classes for odd semester students during the academic year 2020-21.

Dr. S.R Shankapal explained regarding conduction of classes for odd semester students during the academic year 2020-21.

REVA University has planned following 3 models for implementing teaching learning during July-November -2020 period

1. Model-1- July 6th to August 31st

REVA
UNIVERSITY
Bengaluru, India

School of Applied Sciences

Department of Chemistry

M. Sc. (Chemistry)

Proceedings of the BOS in Chemistry (PG)

2019-20

Rukmini Knowledge Park,

Kattigenahalli, Yelahanka, Bangalore - 560 064

Phone No: +91-080-66226622, Fax: 080-28478539
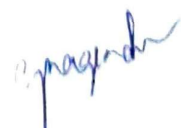
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Proceedings of the Meeting of the Board of Studies in Chemistry held on 19th June 2019 through Virtual meeting on MS-Teams

Members Present:

Sl. No.	Name and Position	Designation	Signature
1	**Dr. N. Ramesh** Dean-Science and Technology REVA University Ph: +91-9880514718 E-mail:dean.tpp@reva.edu.in	Chairperson	
2	**Dr. Madhusudana Reddy M. B.** Assistant Director and Professor School of Chemical Sciences REVA University Ph:+91-9480224757 E-mail: madhusudana@reva.edu.in	Internal Member	
3	**Dr. SakthivelKandaiah** Associate Professor School of Chemical Sciences REVA University Ph:+91-9742585588 E-mail: sakthivel@reva.edu.in	Internal Member	
4	**Dr. Lakshmi B** Associate Professor School of Chemical Sciences REVA University Ph:+91-9902632762 E-mail:lakshmib@reva.edu.in	Internal Member	
5	**Dr. Ramakrishna Reddy. K.** Associate Professor School of Chemical Sciences REVA University Ph.:+91-9885057117 E-mail: k.ramakrishnareddy@reva.edu.in	Internal Member	
6	Dr.Nagendra G. Assistant Professor School of Chemical Sciences REVA University Ph.:+91-9844722805 E-mail: Nagendra.g@reva.edu.in	Internal Member	

At the outset, Dr. N. Ramesh, Chairperson of the BOS in Chemistry welcomed all the members present, explained the purpose of the meeting and the agenda in brief. Then, the agenda were taken up for discussion.

Agenda-1: Approval of Scheme & Syllabus M.Sc. Chemistry program.

The Chairperson explained to the members that the M.Sc Chemistry programme was introduced in REVA University in 2017-18 and revised once in 2018-19 as per the suggestions of members of the BoS. The University has taken a decision to further revise the syllabus in accordance to the new concepts pertaining to the Research and Innovation Therefore, revised draft scheme and syllabus of M.Sc Programme incorporating these modifications has been prepared by the core group of faculty members by internally conducting several group discussions and meetings in the school, and is placed before the BoS members for consideration and decision. He invited the inputs from the members and requested to contribute to enrich the quality of M Sc (Chemistry) program being offered by REVA University. He also also explained the features of CBCS that is being adopted by the University for B.S. and M.Scprograms since its inception.

The members having examined the scheme and syllabus of the program, made the following observations and suggestions:

1. As the beginners should know the basic concepts, in the syllabus, some basics concepts need to be incorporated.
2. To restructure certain topics of higher semesters to the previous semesters strengthen the foundation knowledge.
3. Introduction of RULO courses as a part of the University Curriculum
4. To introduce the bridging programs in the beginning of the semester to reduce the gaps between the PG programs and UG programs.
5. To motivate the students to learn independently asking students to enroll for Online Certificate Courses like - MOOC's, NPTEL, SWAYAM, Coursera, Udemy etc.
6. To introduce Add-on programs to develop the hands-on training experiences.
7. To introduce additional labs and extended lab hours to improve the experimental skill sets and instrument handling ability of students

After detailed discussion the members of the BoS revised scheme and syllabus of M Sc Chemistry and resolved as under.

Resolution: The internal members of the BoS in Chemistry prepared and approved the revised scheme of instruction and detailed syllabus of M Sc Chemistry program and unanimously resolved to recommend to the University to adopt the revised Scheme of Instruction and detailed syllabus from the Academic Year 2019-20.

All the members of the board as well as all faculty involved in the MSc teaching suggested no changes in the syllabus except minor typo errors and many subtopics were added as per the feedbacks received by previous year students in the blowup and following.

Finally, the board finally unanimously accepted the syllabus made for the PG-Chemistry (MSc) as such for the academic year 2019-20. Further the chairperson of the BoS has the liberty to approve the revision of the syllabus below 20% as and when required.

At the end the Chairperson thanked all the Members for having spared their valuable time and also for their active participation and inputs given in the meeting.
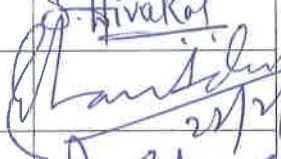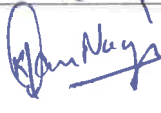
Dr. N. Ramesh
Chairperson, BoS
Department of Chemistry
School of Applied Sciences,
REVA University, Bangalore-64.

Note: The detailed revision of each subject is modified in the curriculum and appended in the Hand book 2019-20. Scheme of Instructions also include for your reference.

Proceedings (Minutes) of the BoS Meeting

Proceedings of the 1ˢᵗ meeting of the Board of Studies (BoS), School of Multidisciplinary Studies held on **22ⁿᵈ Feb 2020** at Conference Hall, Administrative Block at 9:30 am, **REVA University**, Rukmini Knowledge Park, Yelahanka, Bangalore – 560 064.
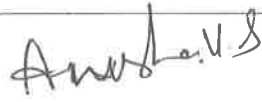
Members Present:

Sl. No.	Name and Affiliation	Status	Signature
1	Dr. Divakar B.P. Dean R & I, Director School of MS, REVA University.	Chairperson	
2	Dr Pratima Khandelwal, Founder and EO, FlyHigh, Bangalore	Member	
3	Ganesh Reddy D Vice President- Head of Biosimilars DS Operations	Member	
4	Kiran N Leader strategic enterprise architect, The Boeing Company	Member	
5	Dr Thiruneelakantan Srinath, Founder and MD, GenoPhe Biotech Pvt. Ltd.	Member	
6	Dr. R Venkata Siva Reddy, Professor, School of ECE, REVA University	Member	
7	Dr. Raje Siddiraju Upendra Associate Professor, Department of Biotechnology, School of Applied sciences, REVA University	Member	
8	Dr. Mohammed Riyaz Ahmed Assoc. Prof. School of ECE, REVA University	Member	
9	Dr. Vishwanath Y, Assoc. Prof. School of CSE, REVA University	Member	
10	Dr Santharam S Katta, Assistant Professor, Department of Biotechnology, School of Applied sciences, REVA University	Member	

Invited Members:

Sl. No.	Name and Affiliation	Status	Signature
1	Dr. Beena G Assoc. Dean, School of MS and AS, REVA University.	Invited Member	

Alumni Member:

Sl. No.	Name and Affiliation	Status	Signature
1	Anusha V S, Clinical data coordinator, IQVIA	Member Alumni	
2	Siddeshwar Jattimath, Senior RF Engineer, QuadGen Wireless solutions Pvt. Ltd.	Member Alumni	

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

Members Absent:

Sl. No.	Name and Affiliation	Status
1	Bony De Kumar Genomics Core Manager, Biomedical Sciences,	
2	Vinod Chippalkatti, President at CENTUM ELECTRONICS LIMITED	

PROCEEDINGS

At the outset, Dr. Diwakar, the Chairperson of the BoS for 4-year B Tech program in "Bioelectronics 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:

Approval of Scheme of Instructions and I Year Syllabus of 2020-24 Batch of B. Tech. Bioelectronics Engineering (B. Tech. BEE).

The Chairperson explained the Scheme of instructions from I Semester to VIII Semester and requested the BoS to approve the above said schemes.

Resolution:

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

1. Approval of I to VIII semester Schemes.
2. Approval of Syllabus of I & II Semester.

for B. Tech. Bioelectronics Engineering (B. Tech. BEE) Program in detail. The BoS members discussed the agenda in detail and suggested some modifications to incorporate as per **Annexure I.**

Agenda -2: Any other matter with the permission of the chair:
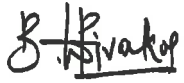
1. Nomination of Panel of Board of Examiners (BoE) - Internal and external.

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 II.**

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

Divakar 22|2|2020

Dr. B. P. Divakar,
BOS Chairman, SMS

School of Multidisciplinary Studies
REVA University, Rukmini Knowledge Park,
Kattigenahalli, Yelahanka, Bangalore-560064

1. 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 Courses.

Resolution

The Board prepared the panel of Examiners (internal and external) for UG Course 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 II.**

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

S. Divakar 22/2/2020

Dr. B. P. Divakar,
BOS Chairman, SMS

School of Multidisciplinary Studies
REVA University Pukmini Knowledge Park,

REVA
UNIVERSITY
Bengaluru, India

School of Electrical & Electronics Engineering

Minutes of the Meeting of the Board of Studies Electrical and Electronics Engineering, REVA University

Meeting date | time *08/06/2020 10:30 AM* | **Meeting location: Boardroom, C.V. Raman Block, Ground floor**

Meeting called by: Dr. Rajashekar P. Mandi, Chairperson

Member Present

Sl. No.	Name of the Member	Designation	Affiliation
1	Dr. Rajashekar P Mandi	Chairperson	Director, School of EEE, REVA University, Bangalore
2	Dr. Divakar B.P	Member	Dean (R&I), REVA University, Bangalore
3	Dr. Santhoshkumar H.	Member	Professor, REVA University, Bangalore
4	Mr. K. Narayana Swamy,	Member	Associate Professor, School of EEE, REVA University, Bangalore
5	Mr. Raghu C.N.	Member	Assistant Professor, School of EEE, REVA University, Bangalore
6	Mr. Sagar B S	Member	Assistant Professor, School of EEE, REVA University, Bangalore

Member Absent

Sl. No.	Name of the Member	Designation	Affiliation
1	Dr. Nagaraj N.S	Member	Co-founder & CEO, Sensei Technologies Pvt. Ltd., Bangalore
2	Mr. Paramesh K.	Member	Dy. Director, KERC, Bangalore
3	Dr. C.S. Sharma	Member	Director CEPO, Indian Space Research Organization (ISRO), Anthariksh Bhavan, New BEL Road, Bangalore
4	Mr. Nagadev Singh	Member	Manager, EFD-Furnace Pvt. Ltd., Bangalore
5	Mr. Manjunath N.	Member	Assistant. Professor, Dept. of Mathematics, REVA University, Bangalore
6	Dr. Arunachalam	Member	Visiting Professor & Former GM, BHEL, Bangalore
7	Mr. Viswanath Hullipad	Member	Professor, School of C&IT, REVA University, Bangalore

Agenda points

1) Review of syllabus for B.Tech in Electrical & Computer Engineering
2) Review of syllabus for B.Tech in Electrical & Electronics Engineering
3) Revision of syllabus for M.Tech in Power & Energy Systems.
4) Syllabus for PhD course work at School of EEE
5) Revision of credits for 2020 batch onwards for B.Tech in Electrical & Electronics Engineering and B.Tech in Electrical & Computer Engineering and MTech in Power and Energy System

Proceedings:

The Chairperson welcomed BOS members and briefed about the outline of the meeting and requested all the members to deliberate on the agenda. He also explained the features of CBCS that is being adopted by the University for both B.Tech and M.Tech programs since its inception.

Agenda 1. Review of syllabus for B.Tech in Electrical & Computer Engineering.

Discussion: The new course B.Tech. In Electrical & Computer Engineering was started during last academic year. The same syllabus is continued without change in syllabus for 2nd year (3rd & 4th sem) batch 2019-23. For 2020-24 batch new courses were introduced.

Resolution: The Board unanimously agreed and approved the scheme & syllabus of BTech in Electrical & Computer Engineering.

Agenda 2. Review of syllabus for B.Tech in Electrical & Electronics Engineering
Discussion:

- The Scheme & syllabus for the course B.Tech. in Electrical & Electronics Engineering is reviewed and the same scheme & syllabus is continued without change for the previous batches and revised scheme with few new courses is proposed for 2020-24 batch.

Resolution: The Board unanimously agreed to implement as discussed above for scheme and syllabus for BTech in Electrical & Electronics Engineering for all batches.

Agenda 3. MTech. Review of syllabus for M.Tech in Power & Energy Systems

Discussion:

- The detailed scheme and syllabus is discussed for MTech in Power & Energy System. It is decided to introduce Digital Protection of Power System, Smart Grid: Architecture, Technology & Application and mini project in 1st semester and mini project in 2nd semester respectively.

Resolution: The Board unanimously agreed to adopt the same scheme and syllabus for MTech in Power & Energy Systems without any changes.

BOS/EEE/2020-21/08-06-2020/1

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Agenda 4. Syllabus for PhD course work at School of EEE.
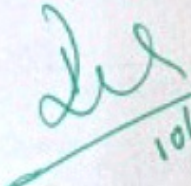
Discussion: The detailed syllabus of the following two courses selected for PhD course work for the Research Scholars at EEE School for the year 2020-21 are discussed.

Resolution: The Board unanimously agreed and approved the syllabus of PhD course work at School of EEE.

Agenda 5. Revision of credits for 2020 batch onwards.
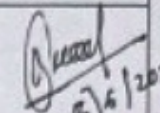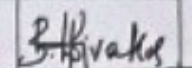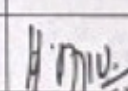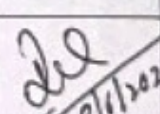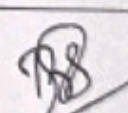
Discussion: The detailed scheme revised to 160 credits for the programs BTech in Electrical and Electronics Engineering and BTech in Electrical and Computer Engineering and at EEE School for the credits for MTech in Power and Energy System for the batch 2020-21 onwards are discussed

Resolution: The Board unanimously agreed and approved revised credits to 160 for both the programs namely, BTech in Electrical and Electronics Engineering and BTech in Electrical and Computer Engineering and 72 credits for MTech in Power and Energy System
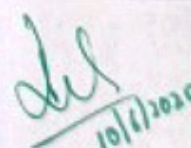
10/6/2020

Director
School of Electrical &
Electronics Engineering
REVA University, Rukmini Knowledge Park
Kattigenahalli, Yelahanka, Bengaluru-560 06

Board of Studies in Electrical & Electronics Engineering

Sl. No.	Name of the Member	Designation	Affiliation	Signature
1.	Dr. Rajashekar P Mandi	Chairperson	Director, School of Electrical & Electronics Engineering, REVA University	*(signed)* 8/6/2020
2.	Dr. Divakar B. P.	Member	Dean, Research & Innovation, REVA University	*(signed)* B.Divaka
3.	Dr. Santhoshkumar Hampannavar	Member	Professor, School of Electrical & Electronics Engineering, REVA University	*(signed)*
4.	Dr. Arunachalam	Member	Visiting Professor & Former GM, BHEL, Bangalore	
5.	Dr. C.S. Sharma	Member	Director CEPO, Indian Space Research Organization (ISRO), Anthariksh Bhavan, New BEL Road, Bangalore	
6.	Mr. Paramesha K	Member	Deputy Director (Power System), KERC, Bangalore	
7.	Dr. Nagaraj N.S	Member	Co-founder & CEO, Sensei Technologies Pvt. Ltd., Bangalore	
8.	Mr. K Nagdev Singh	Member	Manager-Marketing-Special Applications, EFD Induction Pvt. Ltd., Bangalore	
9.	Mr. K. Narayana Swamy	Member	Associate Professor, REVA University	*(signed)*
10.	Dr. Viswanath Hullipad	Member	Professor, School of C&IT, REVA University	
11.	Mr. Raghu C.N.	Member	Assistant Professor, School of EEE, REVA University, Bangalore	*(signed)* 8/6/2020
12.	Mr. Manjunath N.	Member	Assistant. Professor, Dept. of Mathematics, REVA University, Bangalore	
13.	Mr. Sagar B S	Member	Assistant Professor, School of EEE, REVA University, Bangalore	*(signed)*

BOS/EEE/2020-21/08-06-2020/1

(signed) 10/6/2020

Director
School of Electrical &
Electronics Engineering
REVA University, Rukmini Knowledge Park
Kattigenahalli, Yelahanka, Bengaluru-560 06

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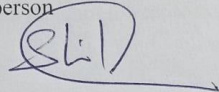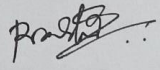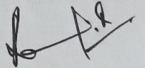
BOS Proceedings

Proceedings of the Meeting of the BOS in B. Sc. Bioinformatics Statistics Computer Science held on 10.04.2021 through hybrid mode.

Venue: School of Applied Sciences, REVA University, Bengaluru.
Date & Time: 10/04/2021   10:00 AM

Members Present:

Sl. No	Name, Designation &Affiliation	External/Internal member
1	Prof. Shilpa B.R Associate Professor, Department of Biotechnology REVA University	Chairperson
2	Dr. Jagadeesh Kumar D Assistant Professor, MVIT, Bangalore-64	External Academic Member
3	Mr. Vivek Chandra Mohan Assistant Professor, Department of Biotechnology Siddaganga Institute of Technology Tumkur	External Academic Member
4	Prof.C.N. Prashantha Assistant Professor Department of Biotechnology School of Applied Sciences REVA University, Bangalore, Karnataka, India	Internal Member
5	Dr.R. Ramachandra Assistant Professor Department of Biotechnology School of Applied Sciences REVA University, Bangalore, Karnataka, India	Internal Member
6	Dr.N.M. GURUPRASAD Assistant Professor Department of Biotechnology School of Applied Sciences REVA University, Bangalore, Karnataka, India	Internal Member

Proceedings

At the outset, the chairperson Prof. Shilpa B.R, welcomed all the BoS members and introduced the external panel members to the BOS. She highlighted the academic development of the University and features of CBCS-CAGP scheme followed by REVA University and shared her expectation that the Curriculum and syllabus should be made industry and research oriented. Prof. Shilpa B.R explained the purpose of the meeting and the agenda in brief, and taken up for further discussion.

Agenda-1:

Discussion on Scheme on instruction, Syllabus, and consolidation of credit hours

The Chairperson presented the syllabus details to the board of members for further review and discussions were carried out on the consolidation of credit hours for the entire curriculum. She also explained the new credit system and softcore subjects, skill development programs introduced in a new scheme for the entire curriculum in each semester. The Board of Studies members studied the Scheme of Instruction and Curriculum relevant to research and industry-oriented contents and suggested valuable inputs provided as under.

Resolution:

Panel members gave valuable inputs regarding the courses to be offered semester-wise. As per the new UGC rules the credits are reduced from 144 to 120 and have introduced some softcore subjects and Skill development programs in the course matrix. Each semester Statistics, Computer Science and Bioinformatics is offered softcore subjects, Skill development course is offered in 3-5th Semesters to enhance the skills based on job-oriented programs. Few courses are reshuffled based on the flow of studies in each subject based on prerequisite include Genetics and Molecular Biology are changed to Cell & Molecular Biology and shuffled from 1st to 2nd Semester. Biochemistry and Microbiology are shuffled from 2nd to 1st semester. Chemoinformatics and drug design course are shuffled from the 6th to 5th Semester. Genomics and Proteomics are shuffled from 5th to 6th Semester. Bioinformatics softcore subjects are offered in 3rd and 6th Semesters. New Softcore subjects are introduced in 3rd Semester such as Bioinformatics Algorithms, Systems Biology. Medical Informatics and Artificial Intelligence in Biology is offered in the 6th Semester.

Agenda 2:- Design of Scheme of Examination

The BOS members discussed about the Scheme of Examination in detail and recommended to the University as here under.

Decision: The members of the BOS designed the Scheme of Examination unanimously decided to recommend to the University the scheme of examination (Annexure – C) decided by the Board of Studies and the same from the year 2021-2022.

Agenda3: Preparation of panel of examiners.

The Board discussed in detail and prepared the panel of examiners and decided as under.

Decision: The BOS member unanimously prepared the BOS panel of Examiners attached Annexure – "D" and recommend to the University to consider the same. (Annexure "C"))

Agenda 3:Any other matter with the permission of the Chair

-NIL-

The Chairperson thanked all the members for the year active participation and valuable input in preparing the scheme of instruction and syllabus. She requested for similar cooperation in future too to take this university forward. The meeting then was concluded.

1. To reduce the credits of the following courses

Semester	Course Code	Course Title	Course type	Existing Credits	Recommended Credits	No. of credits reduced
First	B18MC1070	Molecular Biology and Genetics Lab	HC	2	1.5	-0.5
	B18MC1080	Mathematics Practical-I	HC	2	1.5	-0.5
	B18MC1090	C Programming Lab	HC	2	1.5	-0.5
	B18MC1011	Kannada	CC		2	-1.0
	B18MC1012	Hindi		3		
	B18MC1013	Additional English				
	B18MC1060	Constitution Of India	FC	2	0	-2.0
Second	B18MC2011	Kannada	CC			
	B18MC2012	Hindi	CC	3	2	-1.0
	B18MC2013	Additional English	CC			
	B18MC2060	Environmental Science	FC	2	0	-2.0
	B18MC2070	Sports/Yoga/Dance/ Theatre	RULO	2	0	-2.0
	B18MC2080	Biochemistry & Microbiology Lab	HC	2	1.5	-0.5
	B18MC2090	Mathematics Practical -II	HC	2	1.5	-0.5
	B18MC2X10	Data Structures Lab	HC	2	1.5	-0.5
Third	B18MC3011	Kannada	CC			
	B18MC3012	Hindi	CC	3	2	-1.0
	B18MC3013	Additional English	CC			
	B18MC3060	Open Elective	OE	4	3	-1.0
	B18MC3090	Bioinformatics & Biostatistics Lab	HC	2	1.5	-0.5
	B18MC3X10	Mathematics Practical -III	HC	2	1.5	-0.5
	B18MC3X20	RDBMS Lab	HC	2	1.5	-0.5
Fourth	B18MC4011	Kannada	CC		2	-1.0
	B18MC4012	Hindi	CC	3		
	B18MC4013	Additional English	CC			
	B18MC4070	BioPerl & BioPython Lab	HC	2	1.5	-0.5
	B18MC4080	Mathematics Practical -IV	HC	2	1.5	-0.5
	B18MC4090	LINUX Lab	HC	2	1.5	-0.5
	B18MC4060	Soft Skill Training	RULO	2	0	-2.0
Fifth	B18MC5080	Genomics and Proteomics Lab	HC	2	1.5	-0.5
	B18MC5090	Programming using R lab	HC	2	1.5	-0.5

	B18MC5X10	Mathematics Practical–V lab	HC	2	1.5	-0.5
	B18MC5X20	JAVA Programming Lab	HC	2	1.5	-0.5
	B18MC5X30	Web Programming Lab / Visual Programming Lab / Computer Graphics Lab	HC	2	1.5	-0.5
		Soft Skill Training	RULO	2	0	-2.0
Sixth	B18MC6090	Chemo informatics & Drug designing Lab	HC	2	1.5	-0.5
		Total no of Credits reduced				-24

2. Courses Dropped from the curriculum

Semester	Course Code	Course Title	Course Type	No of Credits
1st	B18MC1020	Functional English	FC	3
Second	B18MC2020	Functional English	FC	3
	B18MC2050	Data Structures Using C	HC	3
	B18MC2070	Sports/Yoga/music/dance/theatre	RULO	2
Third	B18MC3020	Communicative English	FC	3
Fourth	B18MC4040	Biostatistics - II	HC	3
	B18MC4060	Soft Skill Training	RULO	2
Fifth	B18MC5010	Biology –V (Genomics & Proteomics)	HC	2
	B18MC5030	JAVA Programming	HC	2
	B18MC5041	Data mining & Artificial Intelligence	SC	2
	B18MC5042	Data mining & warehousing		
	B18MC5020	Discrete mathematical Structures	HC	2
	B18MC5051	Biostatistics - III	SC	2
	B18MC5052	Numerical Methods - I		
	B18MC5053	Graph Theory		
	B18MC5061	Web programming	SC	2
	B18MC5062	Visual Programming		
	B18MC5063	Computer Graphics		
Sixth	B18MC6010	Chemoinformatics & drug designing	HC	2
	B18MC6042	Structural Chemistry	SC	
	B18MC6051	Biostatistics - IV	SC	2
	B18MC6052	Numerical Methods - II		
	B18MC6053	Operations Research - II		
	B18MC6062	Design and Analysis OF Algorithms	SC	2
	B18MC6061	Computer Networks		
	B18MC6063	Computer Architecture		
	B18MC6080	Skill Development Courses	RULO	2
	B18MC6090	Chemo informatics & Drug designing Lab	HC	2
	B18MC6X20	Computer Science Project	HC	2
	B18MC 6080	Skill development Course	RULO	2
		Total Credits dropped		-45

3. List of New Courses Introduced with Credits

Semester	Course Code	Course Title	Course type	Credits
	B21AHE101	Communicative English	FC	2
First	B21STS111	Discrete Mathematics & Algebra	SC	3
	B21STS112	Logic and Graph Theory		
Second	B21AHE201	Communicative English	FC	2
	B21CP0201	Programming in Python	HC	3
	B21CPS211	Data communication and Networks	SC	3
	B21CPS212	Multimedia computing		
Third	B21BIS311	Bioinformatics Algorithms	SC	3
	B21BIS312	Systems Biology		
Fourth	B21STS411	Industrial Statistics	SC	3
	B21STS412	Sampling methods & official statistics		
	B21ST0403	Statistical Inference	HC	3
Fifth	B21BI0501	Computational drug discovery	HC	3
	B21ST0503	Linear models	HC	3
	B21CP0501	Basics of Web programming	HC	3
Sixth	B21BI0601	Genomics & Proteomics	HC	3
	B21CP0601	Data Mining & Data warehousing	HC	3
	B21BI0603	Genomics & Proteomics Lab	HC	1.5
		AI techniques in Biology	HC	-
	B21CP0602	Machine learning Lab	HC	1.5
Total Credits Introduced				**40**

4. Skill Enhancement Courses Introduced as mandatory courses

Semester	Course Code	Course Title	Course Type	No of Credits
Third	B21BIM301	Skill Enhancement Course	MC	**0**
Fourth	B21BIM401	Skill Enhancement Course	MC	**0**
Fifth	B21BIM501	Skill Enhancement Course	MC	**0**

5. Change of Course Titles

Semester	Course Code	Existed Course Title	Modified Course Title	Course Type
First	B18MC1050	Problem Solving Techniques using C	Programming in C	HC
Third	B18MC3030	Bioinformatics & Biostatistics	Applied Bioinformatics	HC
	B18MC3040	Biostatistics - I	Basic Biostatistics	HC
	B18MC3090	Bioinformatics & Biostatistics Lab	Applied Bioinformatics Lab	HC
Fourth	B18MC4040	Biostatistics - II	Statistical Inference	HC
	B18MC4050	Operating System & Shell Program Using LINUX	Unix and Shell Programming	HC
	B18MC4080	Mathematics Practical -IV	Biostatistics inference Lab	HC
	B18MC4090	LINUX Lab	Unix & shell programming Lab	HC
	B18MC5061	Web programming	Basics of programming	SC

List of Courses enhanced with credits

Semester	Course Code	Course Title	Course Type	Existing Credits	Enhanced Credits
5th	**B21CPS511**	**Software engineering**	**SC**	**2**	+1
	B21CPS512	Cryptography and Network Security			
5th	B21CP0501	Basics of Web programming	HC	2	+1
6th	B21ST0601	Operational Research	HC	2	+1
	B21BIS611	Medical Informatics	SC	2	+1
	B21BIS612	AI techniques in Biology	SC		
	B21BI0602	Bioinformatics Project	HC	4	1.0
			No of credits enhanced		5.0

Comparative table providing credits.

Sl. No	Description	No of Credits	Cumulative Credits
1	Total no. of credits during 2018-19	144	144
2	Total No. of credits dropped	-45	99
3	Total No of credits reduced	-24	75
4	Total No of Credits added	+40	115
5	Total No of Credits enhanced	+5	120
	No. of credits prescribed during the AY 2021-2022		120

Chairperson
Board of Studies,
Bioinformatics Statistics Computer Science

B.Sc. (BStCS)
(Bioinformatics Statistics Computer Science)
Scheme of Instruction and Detailed Syllabus
(Effective from Academic Year 2021-22)

Scheme of Instruction   **Duration: 6 Semesters (3 years)**

S. No	Course code	Title of the Course	HC / SC/	L	T	P	Total	Hours/ week
		FIRST SEMESTER						
1	B21AHK101	Language-I: Kannada-I	FC	1	1	0	2	3
	B21AHH101	Language-I: Hindi-I						
	B21AHA101	Language-I: Additional English-I						
2	B21AHE101	Communication English -I	FC	1	1	0	2	3
3	B21BI0101	Biochemistry & Microbiology	HC	3	0	0	3	4
4	B21ST0103	Fundamental Mathematics-I	HC	3	0	0	3	4
5	B21CP0101	Programming in C	HC	3	0	0	3	4
6	B21STS111	Discrete Mathematics & Algebra	SC	3	0	0	3	4
	B21STS112	Logic and Graph Theory						
7	B21LSM101	Constitution of India and Professional Ethics	MC	0	0	0	0	2
8	B21BI0102	Lab- Biochemistry & Microbiology	HC	0	0	1.5	1.5	3
9	B21ST0104	Lab- Fundamental Mathematics-I	HC	0	0	1.5	1.5	3
10	B21CP0102	C Programming Lab	HC	0	0	1.5	1.5	3
	Total Credits			**14**	**2**	**4.5**	**20.5**	**33**
		SECOND SEMESTER						
11	B21AHK201	Language-II: Kannada-II	FC	1	1	0	2	3
	B21AHH201	Language-II: Hindi-II						
	B21AHA201	Language-II: Additional English-II						
12	B21AHE201	Communicative English-II	FC	1	1	0	2	3
13	B21BI0201	Cell & Molecular Biology	HC	3	0	0	3	4
14	B21ST0203	Fundamental Mathematics-II	HC	3	0	0	3	4
15	B21CP0201	Programming in Python	HC	3	0	0	3	4
16	B21CPS211	Data communication and Networks	SC	3	0	0	3	4
	B21CPS212	Multimedia computing						
17	B21ASM201	Environmental Science	MC	0	0	0	0	2
18	B21BI0202	Lab- Cell & Molecular Biology	HC	0	0	1.5	1.5	3
19	B21ST0204	Lab- Fundamental Mathematics-II	HC	0	0	1.5	1.5	3
20	B21CP0202	Programming in Python Lab-II	HC	0	0	1.5	1.5	3
	Total credits			**14**	**02**	**4.5**	**20.5**	**33**
		THIRD SEMESTER						
21	B21AHK301	Language-III: Kannada-III	FC	1	1	0	2	3
	B21AHH301	Language-III: Hindi-III						
	B21AHA301	Language-III: Additional English-III						
22	B21BI0301	Applied Bioinformatics	HC	3	0	0	3	4
23	B21ST0303	Basic Biostatistics	HC	3	0	0	3	4
24	B21CP0301	Relational Database Management Systems	HC	3	0	0	3	4
25	B21BIS311	Bioinformatics Algorithms	SC	3	0	0	3	4
	B21BIS312	Systems Biology						
26	B2ASO302	Open Elective-Health & Hygiene	OE	3	0	0	3	4
27	B21BIM301	Skill Enhancement Course	MC	0	0	0	0	2
28	B21BI0302	Lab- Applied Bioinformatics	HC	0	0	1.5	1.5	3
29	B21ST0304	Lab- Biostatistics	HC	0	0	1.5	1.5	3
30	B21CP0302	RDBMS Lab-III	HC	0	0	1.5	1.5	3
	Total Credits			**16**	**01**	**4.5**	**21.5**	**34**

Note: Open elective offered by School of Biotechnology, Health & Hygiene shall be opted by other schools. B. Sc Bioinformatics students shall have to opt Open Elective course offered by other schools.

		FOURTH SEMESTER						
31	B21AHK401	Language-IV: Kannada-IV	FC	1	1	0	2	3
	B21AHH401	Language-IV: Hindi-IV						
	B21AHA401	Language-IV: Additional English-IV						
32	B21BI0401	Bioperl & Biopython	HC	3	0	0	3	4
33	B21ST0403	Statistical Inference	HC	3	0	0	3	4
34	B21CP0401	Unix and Shell Programming	HC	3	0	0	3	4
35	B21STS411	Industrial Statistics	SC	3	0	0	3	4
	B21STS412	Sampling methods & official statistics						
36	B21PTM401	Soft skill training (Mandatory)	MC	0	0	0	0	2
37	B21BIM401	Skill Enhancement Course	MC	0	0	0	0	2
38	B21BI0402	Lab- Bioperl & Biopython	HC	0	0	1.5	1.5	3
39	B21ST0404	Lab- Biostatistics inference	HC	0	0	1.5	1.5	3
40	B21CP0402	Unix & shell programming Lab	HC	0	0	1.5	1.5	3
		Total Credits		**13**	**01**	**4.5**	**18.5**	**32**
		FIFTH SEMESTER						
41	B21BI0501	Computational drug discovery	HC	3	0	0	3	4
42	B21ST0503	Linear models	HC	3	0	0	3	4
43	B21CP0501	Basics of Web programming	HC	3	0	0	3	4
44	B21CPS511	Software engineering	SC	3	0	0	3	4
	B21CPS512	Cryptography & Network security						
45	B21SAON01	MOOC/ SWAYAM	SEC	2	0	0	2	2
46	B21BIM501	Skill Enhancement program	MC	0	0	0	0	2
47	B21BI0502	Lab- Computational drug discovery	HC	0	0	1.5	1.5	3
48	B21ST0504	Lab- Sapling methods & official statistics	HC	0	0	1.5	1.5	3
49	B21CP0502	Basics of Web programming Lab	HC	0	0	1.5	1.5	3
		Total Credits		**14**	**0**	**4.5**	**18.5**	**29**
		SIXTH SEMESTER						
50	B21BI0601	Genomics & Proteomics	HC	3	0	0	3	4
51	B21ST0601	Operation Research	HC	3	0	0	3	4
52	B21CP0601	Data Mining & Data warehousing	HC	3	0	0	3	4
53	B21BIS611	Medical informatics	SC	3	0	0	3	4
	B21BIS612	AI techniques in Biology						
54	B21BI0602	Bioinformatics Project	HC	0	0	5.5	5.5	12
55	B21BI0603	Lab- Genomics & Proteomics	HC	0	0	1.5	1.5	3
56	B21CP0602	Machine learning Lab	HC	0	0	1.5	1.5	3
		Total credits		**12**	**0**	**8.5**	**20.5**	**33**
		Total credits of all semesters		**59**	**30**		**120**	**194**

Semester-wise Summary of Credit Distribution

Semester	L	T	P	Credits	Hours
First	14	2	4.5	20.5	33
Second	14	2	4.5	20.5	33
Third	16	1	4.5	21.5	34
Fourth	13	1	4.5	18.5	32
Fifth	14	0	4.5	18.5	29
Sixth	12	0	8.5	20.5	33
Total	**59**	**30**	**31**	**120**	**196**

Distribution of Credits Based on Type of Courses

Semester	Foundation Course (FC)	Hard Core (HC)	Soft Core (SC)	Open Elective (OE)	SEC	Total Credits
First	4	13.5	3	-	-	20.5
Second	4	13.5	3			20.5
Third	2	13.5	3	3		21.5
Fourth	2	13.5	3			18.5
Fifth	-	13.5	3		2	18.5
Sixth	-	17.5	3			20.5
Total	**12**	**85**	**18**	**3**	**2**	**120**

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Scheme of Examination for the MSc Bioinformatics program

S. No	Course code	Title of the Course	HC / SC/	Credits	IA-1	IA-2	SEE
1	B21AHK101	Language-I: Kannada-I	FC	2	12.5	12.5	25
	B21AHH101	Language-I: Hindi-I					
	B21AHA101	Language-I: Additional English-I					
2	B21AHE101	Communication English -I	FC	2	12.5	12.5	25
3	B21BI0101	Biochemistry & Microbiology	HC	3	25	25	50
4	B21ST0103	Fundamental Mathematics-I	HC	3	25	25	50
5	B21CP0101	Programming in C	HC	3	25	25	50
6	B21STS111	Discrete Mathematics & Algebra	SC	3	25	25	50
	B21STS112	Logic and Graph Theory					
7	B21LSM101	Constitution of India and Professional Ethics	MC	0	0	0	0
8	B21BI0102	Lab- Biochemistry & Microbiology	HC	1.5	25		25
9	B21ST0104	Lab- Fundamental Mathematics-I	HC	1.5	25		25
10	B21CP0102	C Programming Lab	HC	1.5	25		25
11	B21AHK201	Language-II: Kannada-II	FC	2	12.5	12.5	12.5
	B21AHH201	Language-II: Hindi-II					
	B21AHA201	Language-II: Additional English-II					
12	B21AHE201	Communicative English-II	FC	2	12.5	12.5	12.5
13	B21BI0201	Cell & Molecular Biology	HC	3	25	25	50
14	B21ST0203	Fundamental Mathematics-II	HC	3	25	25	50
15	B21CP0201	Programming in Python	HC	3	25	25	50
16	B21CPS211	Data communication and Networks	SC	3	25	25	50
	B21CPS212	Multimedia computing					
17	B21ASM201	Environmental Science	MC	0	0	0	0
18	B21BI0202	Lab- Cell & Molecular Biology	HC	1.5	25		25
19	B21ST0204	Lab- Fundamental Mathematics-II	HC	1.5	25		25
20	B21CP0202	Programming in Python Lab-II	HC	1.5	25	0	25
21	B21AHK301	Language-III: Kannada-III	FC	2	12.5	12.5	25
	B21AHH301	Language-III: Hindi-III					
	B21AHA301	Language-III: Additional English-III					
22	B21BI0301	Applied Bioinformatics	HC	3	25	25	50
23	B21ST0303	Basic Biostatistics	HC	3	25	25	50
24	B21CP0301	Relational Database Management Systems	HC	3	25	25	50
25	B21BIS311	Bioinformatics Algorithms	SC	3	25	25	50
	B21BIS312	Systems Biology					
26	B2ASO302	Open Elective-Health & Hygiene	OE	3	25	25	50
27	B21BIM301	Skill Enhancement Course	MC	0	0	0	0
28	B21BI0302	Lab- Applied Bioinformatics	HC	1.5	25		25
29	B21ST0304	Lab- Biostatistics	HC	1.5	25		25
30	B21CP0302	RDBMS Lab-III	HC	1.5	25		25
31	B21AHK401	Language-IV: Kannada-IV	FC	2	12.5	12.5	25
	B21AHH401	Language-IV: Hindi-IV					
	B21AHA401	Language-IV: Additional English-IV					
32	B21BI0401	Bioperl & Biopython	HC	3	25	25	50
33	B21ST0403	Statistical Inference	HC	3	25	25	50
34	B21CP0401	Unix and Shell Programming	HC	3	25	25	50
35	B21STS411	Industrial Statistics	SC	3	25	25	50
	B21STS412	Sampling methods & official statistics					
36	B21PTM401	Soft skill training (Mandatory)	MC	0	0	0	0
37	B21BIM401	Skill Enhancement Course	MC	0	0	0	0

38	B21BI0402	Lab- Bioperl & Biopython	HC	1.5	25		25
39	B21ST0404	Lab- Biostatistics inference	HC	1.5	25		1.5
40	B21CP0402	Unix & shell programming Lab	HC	1.5	25		1.5
41	B21BI0501	Computational drug discovery	HC	3	25	25	50
42	B21ST0503	Linear models	HC	3	25	25	50
43	B21CP0501	Basics of Web programming	HC	3	25	25	50
44	B21CPS511	Software engineering	SC	3	25	25	50
	B21CPS512	Cryptography & Network security					
45	B21SAON01	MOOC/ SWAYAM	SEC	2	2	0	0
46	B21BIM501	Skill Enhancement program	MC	0	0	0	0
47	B21BI0502	Lab- Computational drug discovery	HC	1.5	25		25
48	B21ST0504	Lab- Sapling methods & official statistics	HC	1.5	25		25
49	B21CP0502	Basics of Web programming Lab	HC	1.5	25		25
50	B21BI0601	Genomics & Proteomics	HC	3	25	25	50
51	B21ST0601	Operation Research	HC	3	25	25	50
52	B21CP0601	Data Mining & Data warehousing	HC	3	25	25	50
53	B21BIS611	Medical informatics	SC	3	25	25	50
	B21BIS612	AI techniques in Biology					
54	B21BI0602	Bioinformatics Project	HC	5.5	25	25	50
55	B21BI0603	Lab- Genomics & Proteomics	HC	1.5	25		25
56	B21CP0602	Machine learning Lab	HC	1.5	25		25

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BSc BStCS   Panel of examiners

Sl No	Name of the Examiners	Department
	Internal Members	
1.	Prof. Prashantha C. N	Assistant professor, Dept Of Biotechnology SOAS, REVA University**.**
2.	Prof. Prasanna Kumar. R. B	Assistant professor, School of Computer Science & Application, SOAS, REVA University
3	Dr. Nagamaruti.N	Associate professor School of Mathematics SOAS, REVA University
4	Dr. Guruprasad .N.M	Assistant Professor School of Biotechnology SOAS, REVA University
5	Prof. Sivakumar Paturi	Assistant Professor School of Mathematics SOAS, REVA University
6	Prof. Narayana Gowda	Assistant Professor School of Mathematics SOAS, REVA University
7	Prof. Mohan Kumari	Assistant Professor School of Mathematics SOAS, REVA University
8	Dr. Ramachandra.R	Assistant Professor School of Biotechnology SOAS, REVA University
	External Members	
1	Dr. Sushil Kumar Middha	Assistant professor Department of Biotechnology mLAC , Bangalore
2	Dr. Jagadish Kumar	Associate Professor Department of Biotechnology Sir MVIT, Bangalore
3	Dr. Dileep Francis	Assistant professor Dept of Biotechnology, Kristu Jayanti College, Bangalore
4	Dr. Kumar B	Assistant Professor Dept. of Biotechnology DayanandSagar University, Bangalore

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