



THE ASSAM
ROYAL GLOBAL UNIVERSITY
— GUWAHATI —

CRITERION 1

CURRICULAR ASPECTS

METRIC NO.
1.2

Academic Flexibility

Minutes of Board of Studies Meeting

**Royal School of Information
Technology**

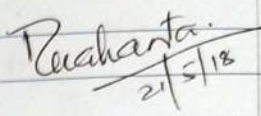
D D M M Y Y Y Y

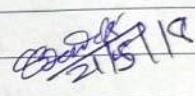
The Assam Royal Global University
First meeting of Board of Studies (BOS),
Royal School of Information & Technology,
Date - 21/05/2018 Time - 10 AM.

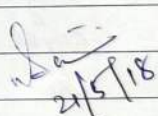
Venue -

The Assam Royal Global University,
Betkuchi, NH 37,
Opp. Tirupati Balaji Temple,
Guwahati - 781035

Serial No.	Members	Signature
1.	Prof. (Dr.) Biswajit Banerjee, Professor & Principal, Dean i/c, Royal School of Engineering & Technology, The Assam Royal Global University	W. Banerjee 21.5.18
2.	Prof. (Dr.) P. H. Talukdar, Professor, Royal School of Engineering & Technology, The Assam Royal Global University	W. Talukdar 21/5/18
3.	Mr. Aniruddha Deka, Assistant Professor & HOD i/c, Royal School of Information & Technology, The Assam Royal Global University.	Aniruddha Deka 21.05.18
4.	Mr. Saurabh Sutradhar, Assistant Professor, Royal School of Information & Technology, The Assam Royal Global University	S. Sutradhar 21.05.2018

Serial No.	Expert	Signature
1.	Prof. (Dr.) D. K. Mahanta Department of Mechanical Engineering, Assam Engineering College, Talukbari, Guwahati - 781013	 21/5/18

Serial No.	Special Invitee	Signature
1.	Dr. Subhajyoti Bordoloi, Associate Professor, Department of Computer Applications, Assam Engineering College, Talukbari, Guwahati - 781013	 21/5/18

2.	Dr. Navajit Saikia, Assistant Professor, Department of Electronics & Telecommunication Engineering, Assam Engineering College, Talukbari, Guwahati - 781013	 21/5/18
----	--	---

3.	Prof. (Dr.) P. K. Goswami, Professor Emeritus, Royal School of Engineering & Technology, The Assam Royal Global University	?
----	---	---

ROYAL SCHOOL OF INFORMATION TECHNOLOGY

MINUTES OF THE FIRST BOS MEETING

Date: 21/05/18

Time: 10:15 a.m.

Location: BOG Room, RGU

Meeting Chaired by: Prof. (Dr.) B. Banerjee, Chairperson and Dean i/c

Members Present:

Prof. (Dr.) B. Banerjee
Chairperson, BOS

Prof. (Dr.) P. H. Talukdar
Internal Expert, BOS

Prof. (Dr.) D. K. Mahanta
External Expert
Dept. of Mechanical Engineering
Assam Engineering College

Dr. Subhrajyoti Bordoloi
Special Invitee
Dept. of Computer Applications
Assam Engineering College

Dr. Nabajit Saikia
Special Invitee
Dept. of ETE
Assam Engineering College

Mr. Aniruddha Deka
HOD, RSIT

Mr. Saurabh Sutradhar
Nominated Member Secretary, BOS

Ms. Ankita Goyal Agarwala
Asst. Prof, RSIT

Mr. Arnab Kumar Mishra
Asstt. Prof., RSET

Agenda of the Meeting:

Presentation and Suggestions on proposed course structures/syllabi of UG and PG courses, RSIT.

The meeting commenced with a welcome address by Mr. Saurabh Sutradhar, Nominated Member Secretary of BOS, RSIT.

Deliberations from Members Present:

1. Object Oriented Programming using JAVA in 3rd semester of B. Sc. (IT) and BCA are to be renamed.
2. Introduction to Digital Techniques in the 1st semester of B. Sc. (IT) and BCA to be renamed as Digital Logic and System Design.

WBan
21.5.18

ROYAL SCHOOL OF INFORMATION TECHNOLOGY

3. Mathematics should be included as a core course and not as a general elective.
 4. Open Source Technologies can be renamed as Open Source Software so that it becomes more specific to the related domain.
 5. In 6th semesters of both B. Sc. (IT) and BCA programmes, an additional theory subject on Cloud Computing of 3 Credits can be offered in place of the allotted lab slot.
 6. For BCA, subjects as
 - (i) Operating Systems and System Software, and
 - (ii) Data Communication and Computer Communication & Networks,can be combined.
- However, if Data Communication and Computer Communication & Networks can't be combined, the syllabus of Data Communication needs to be revised.
7. In MCA programme, the subjects Principles of Management and Organisational Behaviour can be merged into one and a new subject called Optimisation Techniques can be included in the course structure.
 8. All the experts suggested that the list of electives for B. Sc. (IT), BCA, M. Sc. (IT) and MCA should be clearly listed. In the undergraduate programmes, the electives should be light-weight like Data Mining, Artificial Intelligence, Cryptography, etc. and in the postgraduate programmes, the subjects should be more hard core e.g. Big Data Analytics, Pattern Recognition, Natural Language Processing, etc.

Consequent Resolutions adopted:

For BCA-BSC (IT)

1. Object Oriented Programming using JAVA in 3rd semester of B. Sc. (IT) and BCA has been renamed as JAVA Programming.
2. Instead of Introduction to Digital Techniques, Digital Logic and Computer Design is introduced as a new subject in the 1st semester of B. Sc. (IT) and BCA.
3. A student can choose any of the offered subjects under AECC section that has been reflected in the course structure.

W. B. S. 18

ROYAL SCHOOL OF INFORMATION TECHNOLOGY

4. Open Source Technologies has been renamed as Open Source Software so that it becomes relevant to the related domain.
5. In 4th semester of BCA, Operating Systems and System Software have been merged into one and renamed as Operating Systems.
6. A new subject called **Computer Graphics and Multimedia** has been introduced in the 4th semester of the BCA programme.
7. The lists of electives for B.Sc. (IT) and BCA have been finalized.

For MCA

1. In the 1st semester, Computer Fundamentals has been changed to **Open Source Software**.
2. **Optimisation Techniques** and **Signals and Systems** have been included as an elective in the curriculum.
3. As suggested by the esteemed experts, the list of electives has been finalized.

For MSC (IT)

1. As suggested by the esteemed experts, the list of electives has been finalized.

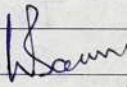
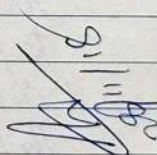
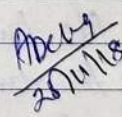
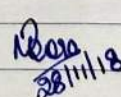
Vote of Thanks: The meeting concluded with the Chairperson offering vote of thanks to the members present

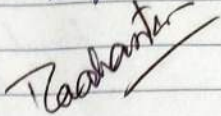
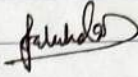
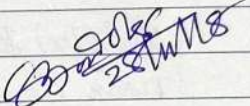
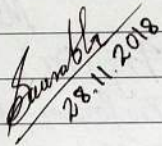

W. Sami
30.5.18

The Assam Royal Global University
Second Meeting of Board of Studies (BOS)
Royal School of Information & Technology
Date : 28/11/2018 Time

Venue :-

The Assam Royal Global University
Betkuchi, NH-37
Opp. Tirupati Balaji Temple.
Guwahati - 781035

Serial No	Chairperson	Signature
1	Prof (Dr) B. Banerjee, Dean i/c of Royal School of Informa- -tion & Technology, The Assam Royal Global University	 28.11.18
	Members	Signature
2	Prof (Dr.) P. H. Talukdar Professor, Royal School of Engineering & Technology, The Assam Royal Global University	
3	Mr. Aniruddha Deka, Assistant Professor & HOD i/c, Royal School of Information & Technology The Assam Royal Global University	 28/11/18
4	Dr. Monalisa Deka, Assistant Registrar (Academics) The Assam Royal Global University	 28/11/18

Serial No	Expert	Signature
5	Dr. D.K. Mahanta Professor, M.E., Assam Engineering College (AEC) Jalukbari, Guwahati - 781013	
6	Mr. Jyotish Talukdar, Technical Manager, Zaloni Technologies India Pvt. Ltd Guwahati	
7	<p style="text-align: center;">Special Invitee</p> Dr. Subhrajyoti Bordoloi Associate Professor, Assam Engineering College (AEC) Jalukbari, Guwahati - 781013	
8	Mr. Saurabh Batabadhar Assistant Professor, CSE Royal School of Engineering & Technology, The Assam Royal Global University	
9	Ms. Ankita Goyal Agarwala Assistant Professor, Royal School of Engineering & Technology The Assam Royal Global University	

Royal School of Information Technology

Minutes of the 2nd BOS Meetings for Royal School of Information and technology

Date: 28/11/2018

Time: 10.30 am

Location: Room No 403, B Block, RGU

Meeting Chaired by Prof. (Dr.) B. Banerjee, Chairperson and Dean i/c

Members Present:

Prof. (Dr.) B. Banerjee
Chairperson, BOS

Prof (Dr.) P. H. Talukdar
Internal Expert, BOS

Dr. Subhrajyoti Bordoloi
Special Invitee
Dept of Computer Applications
Assam Engineering College, Guwahati

Mr. Jyotish Talukdar
Industry Expert
Technical Manager
Zaloni Technologies India Pvt. Ltd., Guwahati

Mr. Aniruddha Deka
Ex-officio Member, BOS
HOD, RSIT

Dr. Monalisa Deka
Nominated Member Secretary, BOS
Assistant Registrar (Academics), RGU

Mrs Ankita Goyal Agarwala
Nominated Member, BOS
Assistant Professor, RSIT

Mr. Saurabh Sutradhar
Special Invitee
Assistant Professor, RSET

Mrs Gitimoni Talukdar Bora
Assistant Professor, RSET

Agenda of the Meeting:

- Presentation and suggestion on proposed syllabi on already approved course structures of UG and PG courses of RSIT.
- Regularization of Evaluation /Examination patterns
- Review of UG syllabi of RSIT from 1st to 4th semesters (if any).
- Any other matter with the permission of chair person

The meeting commenced with a welcome address by Mrs. Ankita Goyal Agarwala , Nominated Member of BOS, RSIT.

Handwritten signature:
3.12.2018 1

Deliberation from Members present:

1. BOS members unanimously agreed that Elective Subjects of undergraduate courses must include only introductory concepts and their practical applications, as detailed knowledge of those can be attained in higher stages of study.
2. Industry Expert pointed out that if the course includes mathematics as a subject, then its scope must be limited to the domain of computer science only.
3. Members also suggested that there should be more number of papers under each Elective (Departmental and Open) and these should be categorized specialization wise so that students can choose specific domains of their interest.
4. The Industry Expert suggested that the paper Data Science using Python instead of Data Warehousing and Data Mining under Elective I be offered, as it is more relevant to current industry scenario.
5. The Academic Expert pointed out that the scope of the paper Wireless Sensor Network under Elective II is only limited to sensor network. Instead, Wireless Network will be more suitable.
6. Some members proposed that the 5th semester MCA Project must have a specific predefined domain related to industry.
7. It was proposed that an Internship of 6 months/full semester, during 6th semester of MCA, will be more effective than an academic project.

Consequently, the following Resolutions were adopted:

For BCA & BSc (IT):

1. More numbers of elective papers included in the course and they are grouped into 3 (three) domains viz. (i)Application oriented, (ii)Data Science oriented and (iii) Network oriented.
2. Data Science using Python introduced as an elective paper in the course.
3. Syllabus of Mathematics is to be revised with the incorporation of concepts from Discrete Mathematics, Data Science, Networking, etc. as per the suggestion cited by the experts.
4. Practical papers in 5th and 6th semesters have been updated with relevant and current topics to equip students with real life application knowledge.

For MCA:

1. Papers from Data Science domain included in Electives as suggested by the expert.
2. "Wireless Sensor Network", the elective paper in Elective II is replaced by "Wireless Network".
3. So as to assess the domain of each student's project and make it industry relevant, it has been decided to have a brain storming session among 5th semester MCA students and Industry Experts prior to the students starting their 5th semester projects.
4. Six month long/full semester Internship Programme included for 6th semester students.

H. B. Bann
3.12.2018

Modalities for B. Tech. (Honours) in Engineering:

1. B. Tech. students (all branches) enrolled since Academic Session 2018-19 onwards can register for B. Tech. (Honours) in the respective Branch of Engineering at the beginning of their 4th semester, subject to meeting the eligibility requirements as mentioned below.

a. Eligibility:

- i. **Existing:** a minimum CGPA of 6.0/10.0 with no back paper to clear at the end of 1st year.
 - ii. **Proposed:** a minimum CGPA of 6.0/10.0 with no back paper in 1st and 2nd semester.
2. A student will be eligible to be awarded B. Tech. (Honours) in their respective Branch of Engineering under the following conditions-

a. Existing:

- i. In addition to the credits specified in the B. Tech. curriculum, if he/she completes an additional 20 credits through MOOCs.
- ii. B. Tech. (Honours) will be awarded with no class.

b. Proposed:

- i. In addition to the credits specified in the B. Tech. curriculum, if he/she earns an additional minimum 20 credits through MOOCs, within the span of 4th semester to 8th semester.
 - A. A student can opt for credit courses (papers) provided through various MOOCs portals like NPTEL, SWAYAM etc. or any other portal suggested by the respective department at the beginning of every semester.
 - B. The list of opted papers should be approved by departmental Head at the beginning of every semester.
 - C. In a semester a student can opt for maximum of 2 courses and/or a maximum of 8 credits.
 - D. A student will have to bear themselves the registration, examination, or certification fee of MOOCs courses, if applicable.
 - E. In case of MOOCs courses where credits are not mentioned, the UGC standard may be followed w.r.t. duration of the course (in no. of hours). RGU will take necessary decisions in this regard.
 - F. A student must score minimum 60% in every MOOCs course.
 - G. Records of enrolments and results must be maintained by the departmental Head. Compiled summary of every session will

have to be forwarded to the Dean and Controller of Examinations as and when required.

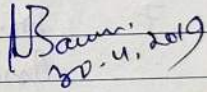
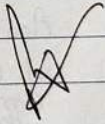
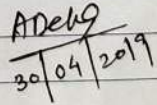
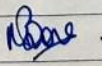
- ii. A student have to complete all the 8 (eight) semesters of B. Tech. without any backlog in regular courses (papers); i.e. excluding the MOOCs courses.
- iii. A student after clearing any MOOCs course will have to produce the original Mark-sheet/Grade-card/Certificate to the departmental head for verification, along with a copy of the same for official records.
 - A. All acquired credits will be added as an additional part of the final Mark-sheet at the end of the 8th semester only, provided all the requirements for B. Tech. (Honours) are satisfied.
 - B. Decision of award of B. Tech. (Honours) will be reflected only at the final Mark-sheet provided all the requirements for B. Tech. (Honours) are satisfied.
 - C. Mark-sheets of the intermediate semesters will not reflect any information about MOOCs scores or B. Tech. (honours).
- iv. B. Tech. (Honours) will be awarded with no class.

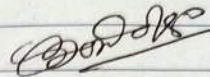
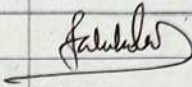
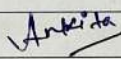
□ □ □ □ □ □ □ □ □ □

The Assam Royal Global University
Third Meeting of Boards of Studies (BOS)
Royal School of Information & Technology
Date: 30/04/2019 Time:

Venue:

The Assam Royal Global University
Betkuchi, NH-37
Guwahati - 781035

Serial No.	Chairperson	Signature
1	Prof. (Dr.) B. Banerjee, Dean i/c of Royal School of Information & Technology, The Assam Royal Global University	 30-4-2019
	Members	Signature
2	Prof. (Dr.) P. H. Talukdar Professor, Royal School of Engineering & Technology, The Assam Royal Global University	
3	Dr. Aniruddha Deka, Assistant Professor & HOD i/c, Royal School of Information & Technology, The Assam Royal Global University	 30/04/2019
4	Dr. Monalisa Deka Assistant Registrar (Academics) The Assam Royal Global University	

Serial No.	Experts	Signature
5	Dr. Subhrajyoti Bordoloi Associate Professor, Assam Engineering College (AEC) Jalukbari, Guwahati- 781013	
6	Mr. Jyotish Talukdar Technical Manager, Zaloni Technologies India Pvt. Ltd., Guwahati	
Special Invitee		
7	Prof. (Dr.) Alak Kumar Buragohain Chairperson (Academics) The Assam Royal Global University	
8	Ms. Ankita Goyal Agarwala Assistant Professor, Royal School of Engineering & Technology The Assam Royal Global University	

The Assam Royal Global University

Third Meeting of the Board of Studies (BoS)

Royal School of Information Technology (RSIT)

30th April 2019

Members Present:

1. Prof. (Dr.) B. Banerjee, Chairperson of the BoS; Dean i/c, RSIT
2. Prof. (Dr.) P. H. Talukdar, Professor Emeritus
3. Dr. Aniruddha Deka, Assistant Professor & HoD (i/c), Department of Computer Science & Engineering, RSIT
4. Mr. Debasish Dev Misra, Assistant Professor, Department of Computer Science & Engineering, RSET
5. Mr. Jyotish Talukdar, Technical Manager, Zaloni Technologies India Pvt. Ltd, Guwahati, Expert
6. Dr. Subhrajyoti Bordoloi, Associate Professor, Department of Computer Applications, Assam Engineering College, Guwahati – 13, Expert

Minutes of the Meeting

{BCA & B. Sc. (IT) }

Suggestions

a) Modifications suggested in the Department Specific Electives (DSE) such as:

- Under Elective II, Software Project Management can be renamed as Software Engineering.
- Under Elective IV, E-Commerce can be offered in place of Cryptography. Further, Social Network Analysis can be renamed as Social Networking.
- Introduction to Probability and Statistics can be included as a core subject in lieu of E-Commerce.

b) Modifications in the Generic Electives such as:

- In Generic Elective I, Introduction to Computing can be offered in lieu of Basic Mathematics.
- Fundamentals of Computer Science can be offered as GE paper.
- In Generic Elective III, Introduction to Database Systems can be offered in lieu of Introduction to Social Media.
Further, with the permission of the chair, modifications on the syllabus of Big Data Analytics for M. Tech (CSE) and M. Sc. (IT) were discussed. The experts suggested a few changes.

Action taken

All suggestions have been taken care of and implemented to the extent possible.

K. Banerjee
24.5.2019

□□□□□□□□

The Assam Royal Global University
Fourth Meeting of the Boards of Studies (BOS)
Royal School of Information Technology (RSIT)
Royal School of Engineering & Technology (RSET)
Date:- 23/05/2020

Platform: Webex (Online mode)

Sl. No.	Chairperson	Signature
1.	Prof. (Dr.) Alak K. Buragohain Chairperson Academics and Dean i/c of RSET & RSIT The Assam Royal Global University	
	Experts	
2.	Mr. Jyotish Jalukdar Technical Manager, Zaloni Technologies India Pvt. Ltd, Guwahati	
	Members	
3.	Dr. Aniruddha Deka, Assistant Professor and HOD i/c Royal School of Information Technology The Assam Royal Global University	
4.	Mr. Debasish Dev Misra, Assistant Professor, Department of CSE, RSET The Assam Royal Global University	
5.	Ms. Jashita Chakraborty Assistant Professor Department of CSE, RSET The Assam Royal Global University	

Sl. No	Members	Signature
6.	Ms. Gitirani Talukdar. Assistant Professor, Department of CSE, The Assam Royal Global University	
7.	Ms. Antara Malakar Assistant Professor, Department of CSE The Assam Royal Global University	
8.	Mr. Sawash Sutradhar Assistant Professor, Department of CSE The Assam Royal Global University.	
9.	Mr. Nayan Jyoti Kalita Assistant Professor, Department of CSE The Assam Royal Global University.	
10.	Ms. Ankita Goyal Agarwala Assistant Professor, RSIT The Assam Royal Global University.	Ankita
11.	Ms. Shamsun Nisar Choudhury Lecturer, Department of CSE The Assam Royal Global University.	
12.	Ms. Parismita Gohwami Lecturer, Department of CSE The Assam Royal Global University	
13.	Mr. Taibur Rahman Teaching Assistant, Department of CSE The Assam Royal Global University	

MINUTES OF THE FOURTH BOS MEETING OF RSIT

Date: 23/5/2020

Time: 12 noon

Platform: Webex (Online mode)

Meeting Conducted by: Dr. Aniruddha Deka, HOD, Dept. of CSE

Agenda of the Meeting: Review of the course structure of B. Tech (CSE) and MCA

Attendees Present:

Dr. Aniruddha Deka, HOD, Dept. of CSE
Mr. Jyotish Talukdar, Industry Expert, BOS
Dr. Manoj Kumar Sarma, Assistant Professor, Dept. of CSE
Mr. Debashis Dev Misra, Assistant Professor, Dept. of CSE
Mr. Saurabh Sutradhar, Assistant Professor, Dept. of CSE
Ms. Ishita Chakraborty, Assistant Professor, Dept. of CSE
Ms. Gitimoni Talukdar, Assistant Professor, Dept. of CSE
Ms. Antara Malakar, Assistant Professor, Dept. of CSE
Ms. Ankita Goyal Agarwala, Assistant Professor, Dept. of CSE
Ms. Shamsun Nehar Choudhury, Lecturer, Dept. of CSE
Ms. Parismita Goswami, Lecturer, Dept. of CSE
Mr. Taibur Rahman, Teaching Assistant, Dept. of CSE

Remarks:

1. Mr. Talukdar was satisfied with the overall course content in both CSE and MCA.
2. Mr. Talukdar suggested to add Cloud computing course as one of the elective in as cloud technologies led by AWS, Azure have gained lot of traction and adaptation across all IT organizations and is a must to succeed for most engineers.
3. Mr. Talukdar also mentioned that most companies now work on advanced and adopted software methodologies such as Agile, Devops, Kanban etc., in addition to traditional waterfall model. Knowledge of these through a subject would be really helpful in practical applications when they walk into a working environment.
4. It was also suggested in the meeting that Artificial Intelligence course can be included in the 7th semester of B.Tech Programme and Cryptography and Network Security in the 8th semester, both as core papers.

Motion of the Meeting:


All the suggestions from the members have been duly noted down and required changes have been incorporated in the course structure.

□ □ □ □ □ □ □ □ □ □

The Assam Royal Global University
 Fifth Meeting of the Board of Studies (BOS)
 Royal School of Engineering & Technology &
 Royal School of Information Technology

Date: 13th July 2021

Sl. No.	Chairperson	Signature
1.	Prof. (Dr.) Alak Kr. Buragohain Chairperson academics Dean i/c of RSET & RSIT The Assam Royal Global University	
	Expert	
2	Dr. Subhrajyoti Bordoloi Associate Professor, Department of Computer Application, Assam Engineering College	
	Members Present	
3	Dr. Aniruddha Deba Assistant Professor, HoD(i/c) Department of CSE, Coordinator RSIT, Royal Global University	
4	Mr. Saurabh Bhatnagar Assistant Professor, Dept. of CSE, Royal Global University	
5	Mrs. Gelimoni Talukdar Bora Assistant Professor Dept of CSE, Royal Global University	
6	Mr. Nayan Jyoti Kalita, Assistant Professor, Dept of CSE, Royal Global University	

Sl No	Members Presents	Signature
7	Ms Alsana Laskar Lecturer, Dept. of CSE, Royal Global University	 15.7.21
8	Ms. Parimita Goswami Lecturer Dept. of CSE, Royal Global University	
9	Ms. Shamsun Nehar Choudhury Lecturer, Dept of CSE, Royal Global University	

The Assam Royal Global University
MINUTES OF THE FIFTH BOS MEETING
Royal School of Engineering & Technology
Royal School of Information Technology

13th July 2021

Time: 11.00 a.m.

Platform: Google Meet (Online Mood)

Meeting Chaired by: Prof. (Dr.) Alak Kr. Buragohain Chairperson and Dean i/c, RSET

Agenda of the Meeting:

Presentation and Suggestions on proposed course structures/syllabi of UG and PG courses, RSET and RSIT.

Experts Present:

Dr. Subhrajyoti Bordoloi
Associate Professor, Department of Computer Applications, AEC.

Dr. Bibhash Sharma
Associate Professor, Department of Civil Engineering, AEC.

Attendees Present:

Dr. Aniruddha Deka, Assistant Professor, HOD, Dept. of CSE, Co Ordinator IT
Dr. Arnab Sarma, Assoc. Prof, HOD, Dept. of CE, RSET
Mr. Saurabh Sutradhar, Assistant Professor, Dept. of CSE
Ms. Gitimoni Talukdar, Assistant Professor, Dept. of CSE
Mr. Nayan Jyoti Kalita, Assistant Professor, Dept. of CSE
Ms. Shamsun Nehar Choudhury, Lecturer, Dept. of CSE
Ms. Parismita Goswami, Lecturer, Dept. of CSE
Ms. Afsana Laskar, Lecturer, Dept. of CSE
Mr. Zunaid Ahmed, Assistant Professor, RSET
Mr. Ashok Talukdar, Assistant Professor
Mr. Biswajit Choudhury, Assistant Professor, RSET
Dr. Hirak Ranjan Das, Assistant Professor, RSET

Topics Discussed:

1. Course Structure of M.Tech CSE(AI)
2. Course Structure of M.Tech CSE(IOT)
3. Course Structure of M.Tech CSE

4. Course Structure of B.Tech CSE
5. Course Structure of B.Tech + M.Tech Integrated
6. Course Structure of BCA
7. Course Structure of MCA 2 Years
8. Bridge Course for MCA
9. Course Structure of MCA 3 Years
10. Course Structure of B.Sc IT
11. Course Structure of M.Sc IT
12. Course Structure of B.sc + M.Sc IT (Integrated 4 years)

Remarks from Members Present:

1. M.Tech CSE (Specialization in AI)

- Prof. Bordoloi suggested that the M.Tech CSE to be awarded with specialization in Artificial Intelligence (AI).
- MOOCS subjects to be provided for elective subjects.

2. M.Tech CSE (Specialization in IOT)

- Prof. Bordoloi suggested that the M.Tech CSE to be awarded with specialization in Internet of Things (IOT).
- MOOCS subjects to be provided for elective subjects.

3. M.Tech CSE

- Prof. Bordoloi suggested that the Mathematical Foundations for Computer Science to be removed.
- Core subjects like Distributed System and Data Mining to be included in the syllabus.
- Advanced Computer Architecture.
- With due permission from faculty and expert present, Syllabus has been modified in subjects: Web Technologies, Advanced Database Management system, Advanced Computer Architecture, Theory of Computation and Advanced Computer Networks.
- In Third semester Robotics and Intelligence Systems has been provided as core subject.

4. B.Tech CSE

- Prof. Bordoloi suggested that the Discrete Mathematics to be included in third semester.
- Computer graphics to be brought in Fourth semester.
- Attendance % weightage to be increased and to be suggested to Academic Council.
- In Sixth semester Software Engineering to be included.
- Biology for Engineers for CSE will be under GE program.

5. B.Tech + M.Tech Integrated 5 Years

- Multiple exit and multiple entry to be facilitated.
- Seventh and Eight semester syllabus to be changed.
- If a student completes till Sixth Semester, **Diploma Certificate** to be given.
- If a student completes till Eight Semester, **B.Tech CSE Degree** to be given.
- If a student completes full course, **B.Tech + M.Tech Integrated Degree** to be given.

6. BCA 3 Years

- In First Semester, Subject "Digital Logic and System Design" is changed to "Digital Logic".
- In Third Semester, Subject "Data Communication" is removed and the subject "Graph Theory" is added.
- In Fourth Semester, the name of the subject "Computer Networks" is changed to "Data Communication and Networks".
- In Sixth Semester, the subject "Management Information Systems" is removed and the subject "Artificial Intelligence" is added.

7. MCA 2 Years

• ELIGIBILITY FOR ADMISSION (As Per AICTE)

- Passed BCA / B.Sc (IT/CS) / Bachelor Degree in Computer Science Engineering or equivalent degree.

OR

- Passed B.Sc, B.Com, B.A with Mathematics at 10+2 or at Graduate Level(With Additional 1 Year Bridge Course)
- Obtained at least 50% (45% marks in case of candidate's belonging to reserved category-ST/SC) in the qualifying examination.

- As suggested by Prof. Bordoloi, In the First semester Subject name "Data Structures and Algorithms" to be renamed as Advanced Data Structure and syllabus to be designed as Advanced Data Structure.
- MFCS to be removed from the First semester and other subject such as "Operating System-I" to be included in the First Semester.
- In the Second Semester, Probability and Statistics to be kept in Bridge Course and Distributed System to be included.
- In Second Semester, Modern Operating System can be renamed as Operating System-II with advanced topics included.
- In Second Semester, Database Management System to be renamed as Advanced Database Management System.
- In Second Semester, Database Management System Lab to be renamed as Advanced Database Management System Lab.

- In Third Semester the subject "Software Project Management" is removed and the subject "Advanced Software Engineering" is added.
- In the Fourth semester, AECC paper to be provided from the MOOCS courses.
- In Fourth Semester, the name of the subject "Full Time Industrial Training/Internship" is changed to "Project Dissertation".
- The paper on English in the fourth semester has been advised to be removed.

8. Bridge Course (1 Year)

- Prof. Bordoloi suggested the following subjects for 1 Year Bridge Course.
- **First Semester:**
 - ✚ **Introductory Programming using C.**
 - ✚ **Mathematical Foundation for Computer Science.**
 - ✚ **Digital System.**
 - ✚ **Fundamentals of Computer.**
 - ✚ **Programming Lab.**
 - ✚ **Communicative English.**
- **Second Semester:**
 - ✚ **Introduction to Computer Networks.**
 - ✚ **Probability & Statistics**
 - ✚ **Introduction to DBMS.**
 - ✚ **Data Structure with Object Oriented Programming.**
 - ✚ **Data Structure with Object Oriented Programming Lab.**
- **Exit criteria:** PGDCA certificate to be provided if the student doesn't want to pursue MCA and successfully completed the Bridge Course.

9. PGDCA (1 Year)

- In First Semester, Introductory Programming to be included.

10. MCA 3 Years

- **No changes**

11. M.Sc. IT

- In Second Semester Subject "Data warehousing" has been renamed as "Data Warehousing and Data Mining" and syllabus has been modified.
- In Second semester, Computer Networks subject has been renamed to Advanced Computer Networks.
- Subject code of Modern Operating system has been interchanged with Web Technology.
- In Fourth semester, subject Data Mining has been removed and replaced by **Big Data Analytics.**

12. B.Sc IT +M.Sc IT Integrated (4 Years)


- Criteria: Student cannot leave in between and B.Sc IT degree cannot be provided.
- Must complete the course to get B.sc + M.Sc Integrated degree.
- Notification to academic council regarding the exit criteria.

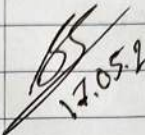
Motion of the Meeting

- All the suggestions from the experts have been taken care of and implemented to the best of its extent.
- Multiple exit multiple entry criteria for Course will be implemented as per UGC guideline on the same matter.
- For MCA 2-years programmes, the bridge courses will be covered through online platforms like MOOCS, SWAYAM, NPTEL, etc.
- The English paper from 4th semester of 2-year MCA programme has been removed as they are required to go for industrial internship for 6 months in final semester

[] [] [] [] [] [] [] [] [] []

The Assam Royal Global University
 6th Meeting of Board of Studies (BOS)
 Royal School of Engineering & Technology (R.SET)
 &
 Royal School of Information Technology
 Date: 17.05.2022
 Venue: ±

Serial No	Chairperson	Signature
1.	Prof. (Dr.) Alak Kr. Buragohain Chairperson (Academic) Dean-in-Charge RSET RSIT, RGU	Alak 17-05-22
	Expert	
2.	Prof. Shaikhar Kumar Sarma Head of the Department, Department of Information Technology Gauhati University	
	Members	
3.	Dr. Aniruddha Deka Associate Prof., HoD (etc), Department of Computer Science, RSET RSIT, RGU	Aniruddha
4.	Moon Moon Ahmed Assistant Manager Academic Section, The Assam Royal Global University	
5.	Dr. Anupam Das Associate Professor, Department of CSE Royal School of Engineering & Technology	Anupam

Serial No	Members	Signature
6.	Mrs Ankita Goyal Agarwal Assistant Professor Department of CSE, RGU	
7.	Mr. Saurabh Subadhor Assistant Professor Department of CSE, RGU	 12.05.22
Invitee		
8.	Prof. (Dr.) Anub Sarma Head of the Department, Department of Civil Engineering, RSET, RGU	
9.	Dr. Hirak Ranjan Das, Assistant Professor & HoD Department of Mechanical Eng- neering, RSE, RGU	
10.	Dr. Kamal Debnath Associate Professor & HoD Department of Mathematics Royal School of Applied & Pure Sciences, RGU	

MINUTES OF THE MEETING

Date: 17/5/2022

Time: 3:00pm onwards

Location: Conferentia B block 5th Floor

Meeting Conducted by: Dr. Aniruddha Deka, HOD, Dept. of CSE

Agenda of the Meeting: Review of the course structure of B. Tech (CSE) and MCA

Attendees Present:

Dr. Aniruddha Deka, HOD, Dept. of CSE
Dr. Shikhar Kumar Sharma, Academic Expert, BOS
Dr. Anupam Das, Associate Professor, Dept. of CSE
Ms. Ishita Chakraborty, Assistant Professor, Dept. of CSE
Ms. Gitimoni Talukdar, Assistant Professor, Dept. of CSE
Mr. Saurabh Sutradhar, Assistant Professor, Dept. of CSE
Mr. Nayan Jyoti Kalita, Assistant Professor, Dept. of CSE
Ms. Nilakshi Deka, Assistant Professor, Dept. of EE
Ms. Ankita Goyal Agarwala, Assistant Professor, Dept. of CSE
Ms. Parishmita Goswami, Lecturer, Dept. of CSE
Ms. Afsana Laskar, Lecturer, Dept. of CSE
Ms. Spandan Borthakur, Lecturer, Dept. of CSE
Ms. Pritishma Konwar, Lecturer, Dept. of CSE
Mr. Diganto Sahu, Lecturer, Dept. of CSE
Mr. Vikram Bikash Das, Lecturer, Dept. of CSE

Remarks:

BTech CSE

1. Dr. Shikhar Sharma Sir suggested that number of Mathematics paper have to be reduced. He suggested that there can be at most two Mathematics paper – Mathematics-I & Discrete Mathematics.
2. Dr. Sharma proposed that there should be one Environmental Studies paper in BTech which should be offered in the first semester. He suggested that the name of the paper should be changed to “Environmental Studies-I”.
3. Dr. Shikhar Sharma insisted on providing basics of computing and hence suggested a paper in BTech first year where basics of computing will be taught and the name he suggested as Fundamentals or Foundation of Computing.
4. The subjects Operating Systems should be shifted to 6th Semester & instead Data Communication Networks should be brought to 5th semester.

5. Dr. Sharma suggested the name of OS lab to be changed as OS & System Programming Lab.
6. The subject Microprocessor can be blended with COA & insisted on introducing a python programming subject in 6th semester.
7. One seminar paper has to be given in B.tech 6th semester to enhance the writing & reading skills which can be either of 1 or 2 credit.
8. Dr. Sharma recommended to have one paper related to Application Development (both theory and practical) at the level of 3rd year, before internship.
9. Dr. Sharma emphasis on renaming the paper Cryptography and network Security to Cryptography and Cyber Security which will include components of Cyber Law and Cyber Security

M.Tech CSE

1. Dr. Shikar Sharma recommended that there should be Advance Web Technology Subject in the first semester instead of Web Technology. Since they have already studied the paper in B.Tech.
2. The external expert suggested to convert the Communicative English Paper in terms of Research paper writing.
3. Dr. Sharma proposed to incorporate a Machine Learning paper in first semester instead of Data mining paper, which can be given as optional paper.
4. Dr. Sharma suggested that the Computing lab of first semester should include components of Advanced DBMS and Web Technology.
5. Dr. Sharma proposed to remove COA paper as a core subject and to include COA and Data Mining as elective in first sem.
6. Dr. Sharma proposed not to put core subject in 3rd semester, and only electives paper should be there.
7. Dr. Sharma suggested not to put any Communicative English, Behavioral Science or any other core theory paper in 4th semester. And also expressed that the focus should be only be on Research project.

M.tech In Artificial intelligence

1. Dr. Shikar Sharma initiated with the remark about who are the eligible candidates from different courses to join the Post graduate course of Artificial Intelligence.
2. Dr. Sharma proposed to shift the Machine Learning paper to first semester instead of 2nd semester.
3. The external expert suggested to put Natural Language Processing paper in first semester.
4. Dr. Sharma proposed to shift Statistical Decision Making and Data Visualization paper to 2nd semester.

5. Dr. Sharma suggested to club Predictive and Variance Analysis and Statistical Decision making.
6. Dr. Sharma suggested to put Pattern Recognition paper and Digital Image Processing paper as electives.
7. Dr. Sharma proposed to keep only one elective paper and project in 3rd semester and he also suggested to have only project in 4th sem.
8. Dr. Sharma proposed that the total credit for this course should be around 80 to 90.

BCA

1. Dr. Shikhar Sharma suggested to change the name of the paper "Digital Logic and Computer Design" as "Digital Logic".
2. Dr. Sharma put forward his opinion to remove Graph Theory paper from the course structure of BCA.
3. Dr. Sharma recommended to introduce OS & Admin System Lab instead of OS lab.
4. The external expert proposed one elective paper in 5th semester, which will include both Theory and lab. And he also recommended the elective paper to be any one of the following. Web tech or Application Development & Information theory/ Mobile Application Development.
5. Dr. Sharma Suggested to omit System Analysis and Design and to introduce Software Engineering in 6th semester.
6. Dr. Sharma recommended to introduce Machine Learning and Python instead of Artificial Intelligence in 6th sem.

B.Sc(IT)

1. Dr. Shikhar Sharma proposed to introduce one core subject in B.Sc(IT) , one science subject elective and one humanities paper in first semester.
2. Dr. Sharma suggested that the 2nd semester curriculum should be aligned with 2nd semester BCA and along with it should include science paper and one humanities paper.
3. Dr. Sharma suggested Graph theory can be introduced in 3rd semester along with one science elective and one discipline elective.
4. Dr. Sharma proposed to have one science elective and one discipline elective in 4th semester.
5. The expert proposed to have two electives, one discipline core and either one core or science elective.
8. It was also suggested in the meeting that Artificial Intelligence course can be included in the 7th semester of B.Tech Programme and Cryptography and Network Security in the 8th semester, both as core papers.

Integrated BSc IT-MSc IT

1. Dr. Shikhar Sharma accepted the proposal of introducing a new subject in integrated BSc IT 5th semester i.e, Information Theory and Coding/ Statistical Computing using R.
2. Dr. Sharma suggested to omit the subject System Analysis & Design in 6th semester and further added to include subjects Multimedia theory or Cyber Security and AI or NLP as one of the core paper.
3. He proposed to have the paper research methodology, one elective paper & one major project.
4. In 9th & 10th semester Dr. Sharma proposed to have one elective paper & major project.

MSc-IT

1. Dr. Shikhar Sharma recommended to keep the course structure of MSc-IT same as integrated MSc-IT.

MCA

1. The course structure of MCA first semester should be included from MSc-IT first semester.
2. In second semester Dr. Shikhar Sharma recommended that pattern recognition paper is not required as per MSc-IT core structure.
3. In 3rd semester the expert proposed to have **advanced web technology** paper instead of Web Technology. He also advised to scrap Design & Analysis of Algorithm and Advanced Software Engineering paper.
4. He proposed to keep one seminar paper in 3rd Semester and to include just one elective paper along with project phase 1.
5. In 4th semester the expert proposed to remove comprehensive viva and introduced two elective papers along with project phase 2.
6. The total course credit he recommended to keep it below 90.

Motion of the Meeting:

All the suggestions from the members have been duly noted down and required changes will be incorporated in the course structure.



THE ASSAM

ROYAL GLOBAL UNIVERSITY

(Under Section 2(f) of UGC Act 1956)

Date: 21/12/2022

To,
Prof. Subhrajyoti Bordoloi
Professor, Department of Computer Application
Assam Engineering College

Subject- Intimation regarding nomination as external expert and to attend the meeting of Board of Studies (Departmental Board) of the Department of Information Technology (RSIT).

Dear Sir,

Greetings from The Assam Royal Global University!

We are pleased to have you as a nominated external expert of the Board of Studies (Departmental Board) for the department of Information Technology (RSIT).

I take the privilege to intimate you that the meeting of Board of Studies (Departmental Board) of the department of Information Technology (RSIT) is scheduled on 22nd December 2022 at The Assam Royal Global University, Guwahati from 10 am.

I request your goodself to kindly accept the invitation and attend the meeting and provide your valued guidance.

Looking forward for your acceptance and gracious presence.

Sincerely yours

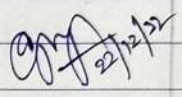
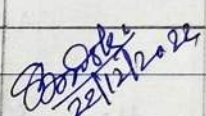
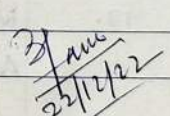
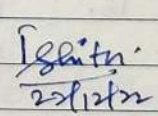
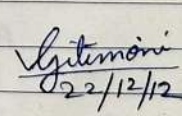
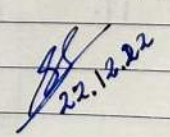
Diganta Munshi

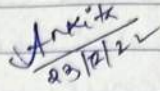
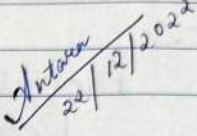
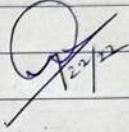
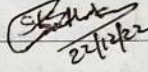
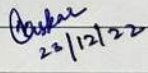
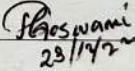
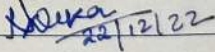
Dr Diganta Munshi
Registrar
The Assam Royal Global University



Received
B. Bordoloi
22/12/2022

The Assam Royal Global University
 7th Meeting of Board of Studies (BOS)
 Royal School of Information Technology.
 Date: 22/12/2022
 Venue: Conferentia, B block 5th floor.

SL.No.	Chairperson	Signature
1.	Prof. (Dr.) Ankur Ganguly Dean - Academics and Dean i/c, RSET & RSIT, RGV	 22/12/22
	Expert (Academic)	
2.	Dr. Subhrajyoti Bordoloi Professor, Department of Computer Applications, Assam Engineering College, Jalukbari, Guwahati - 781013	 22/12/22
	Members	
3.	Dr. Anupam Das Associate Professor, Department of CSE & RSIT (Co-ordinator)	 22/12/22
4.	Moon Moon Ahmed Assistant Manager (Academic)	
5.	Ms. Ishita Chakraborty Assistant Professor, Dept. of CSE, RSET	 22/12/22
6.	Ms. Gitimoni Talukdar Assistant Professor, Dept. of CSE, RSET	 22/12/22
7.	Mr. Saurabh Sutradhan Assistant Professor, Dept. of CSE, RSET	 22.12.22

Sl.No.	Members	Signature
8.	Ms. Ankita Goyal Agarwal Assistant Professor, Department of CSE, RSET	 23/12/22
9.	Ms. Antara Malakar Assistant Professor, Department of CSE	 22/12/2022
10.	Mr. Nayan Jyoti Kalita Assistant Professor, Dept. of CSE	 22/12
11.	Mr. Spandan Kr. Barathakur Assistant Professor, Dept. of CSE	 22/12/22
12.	Ms. Afsana Laskar. Assistant Professor, Dept. of CSE	 22/12/22
13.	Ms. Parismita Goswami Assistant Professor, Dept. of CSE	 23/12/22
14.	Ms. Nilakshi Deka Assistant Professor, Dept. of CSE	 22/12/22
15.	Ms. Pruthishma Kombar Assistant Professor, Dept. of CSE	
16.	Dr. Sumi Kankana Dewan Assistant Professor, Dept. of CSE	
17.	Dr. Israfil Hussain Assistant Professor, Dept. of CSE	

Expert (Industry)
Member

Sl. No.
18.

Mr. Anoop Kumar Prasad
Software Engineer at Capgemini
Researcher, Fellow of inSig

Signature

Invitee

19.

Prof. (Dr.) Arinab Sarma
HOD, Dept. of CE, RSET, RGU

[Signature]
22/12/22

20.

Dr. Kamal Debnath,
Associate Professor, Dept. of
Mathematics, RSAPS, RGU

[Signature]
22/12/2022

21

Dr. Bimalendu Kalita
Associate Professor, Dept. of
Mathematics, RSAPS, RGU
Student Representatives

[Signature]
22/12/2022

22.

Mr. Arunabh Bhanadwaz
B.Sc(IT) - Alumni
2022 Passed out

23.

Ms. Barsa Das
BCA - 5th Semester

Member Secretary

24

Dr. Diganta Munshi
Registrar, The Assam Royal
Global University

[Signature]
22.12.22

MINUTES OF THE MEETING

Date: 22/12/2022

Time: 10:00 am onwards

Location: BOG room

Meeting Conducted by: Dr. Anupam Das, Associate Professor, Co-ordinator (RSIT)

Agenda of the Meeting: Review of the course structure of BCA and BSC IT

Attendees Present:

Dr. Subhrajyoti Bordoloi, Professor, Department of Computer Applications, Assam Engineering College, Academic Expert, BOS
Dr. Diganta Munshi, Registrar, RGU
Dr. Ankur Ganguly, Dean (i/c) RSET & RSIT, Dean(Academics),RGU
Mr. Anoop Kumar Prasad, Software Engineer, Capgemini, Industry Expert
Dr. Anupam Das, Associate Professor, Co-ordinator (RSIT)
Dr. Arnab Sarma , HoD , Department of CE, RSET
Dr. Kammal Debanath . Associate Professor, Department of Mathematics ,RASPS, RGU
Dr. Bimalendu Kalita , Associate Professor ,Department of Mathematics ,RASPS, RGU
Ms. Ishita Chakraborty, Co-ordinator & Assistant Professor, Dept. of CSE
Ms. Gitimoni Talukdar, Assistant Professor, Dept. of CSE, RSET
Ms. Antara Malakar, Assistant Professor, Dept. of CSE, RSET
Mr. Saurabh Sutradhar, Assistant Professor, Dept. of CSE, RSET
Mr. Nayan Jyoti Kalita, Assistant Professor, Dept. of CSE, RSET
Ms. Nilakshi Deka, Assistant Professor, Dept. of CSE, RSET

Remarks for BSC IT:

After much deliberation and discussion Hon'ble expert Dr.Subhrajyoti Bordoloi along with Dr.Diganta Munshi,Registrar, RGU and Dr.Ankur Ganguly,Dean (i/c) RSET & RSIT, Dean(Academics),RGU suggested the following changes:

1st Semester:

- 1) To rename the core subjects as: i) Mathematical Foundation of Computer Science; ii) Introduction to Programming using C/C++, iii)Digital Logic/Digital Systems.
- 2) The Mathematical Foundation of Computer Science paper should include 1 module of Mathematical Foundation and three modules of Discrete Mathematics.
- 3) To include a subject like "Introduction to Web Technology" instead of Office Automation in VAC-I.

2nd Semester:

- 1) To rename the subject Data Structures as Data Structures and Algorithms.
- 2) To include the paper in place of Discrete Maths
- 3) to change the subject "Computer Hardware & Networking" to an advance subject like "Introduction to Linux & Shell Programming"
- 4) To rename the SEC-II subject as Windows programming using C#.
- 5) to give easy GE Subject and to change the GE allotted in 2nd Semester (Cyber Site Programming).

3rd Semester:

- 1) To include embedded SQL in DBMS.
- 2) To rename OOP using Java as OOP using Core Java.
- 3) To dilute the syllabus of GE-VI: E-Commerce. Bordoloi Sir suggested to remove few topics and include topics like ethics, IPR, cyber laws and also to rename the subject as Cyber Laws and IPR in E-Commerce. He also suggested to provide specific pre-requisites for all GE subjects being offered.

4th Semester:

- 1) The industry expert Anoop Kumar Prasad suggested to provide opportunity for internship at the starting of the session.
- 2) He also suggested to modify the VAC subject offered in 4th semester, i.e. Disaster Management. He suggested that the Disaster Management paper should be department specific and should include topics like Data Recovery or Cloud Services.
- 3) Dr. Subhrajyoti Bordoloi Sir suggested that instead of Linux Administration, system administration can be given in 4th semester and must include UNIX, Windows and Server Management.

Other Comments:

- 1) Dr. Bordoloi recommended to remove the Probability & Statistics paper from 5th semes of BSC IT. In 5th semester course structure, Sir also suggested to rename the 5th semester subject "System Analysis and Design" as "Software Engineering" and suggested to put the prerequisites for Software Engineering as DBMS and Data Structure.
- 2) He also suggested to increase the list of Department Specific Elective papers in 3rd and 4th semester. He also suggested to not include the paper "Recent Trend in Computer Science"

- in the list of Department Specific Electives. He also suggested to include Artificial Intelligence in the list of Department Specific Electives.
- 4) Dr. Ankur Ganguly Sir suggested to add IOT and Data Science in the list of Department Specific Elective papers in either 3rd or 4th semester.
 - 5) Data Communication and Networking should not be DSE. It must be compulsory in 5th or 6th semester and can be renamed as DCN and Information Security.

Remarks for BCA:

1st Semester & 2nd Semester:

- 1) Dr. Subhrajyoti Bordoloi Sir suggested to keep the 1st year course structure of BCA same as BSC IT 1st year course structure.

3rd Semester:

- 1) Core Java should be renamed as Core Java in Linux
- 2) Graph theory should be renamed as Applications of Graph Theory in Computer Science.

4th Semester:

- 1) Rigorous practical papers must be in 4th sem. OS can be in the 5th sem.

Other Comments :

- 1) The School Board also suggested to keep the course structure of BCA application based and B.Sc. (IT) to be more of science background.
- 2) Dr. Subhrajyoti Bordoloi Sir suggested to keep all programming based practical papers till 4th semester.
- 3) Dr. Bordoloi recommended to keep "Advanced Java" as an elective paper in 4th semester of BCA.
- 4) He also suggested that the Cloud Computing can be given as DSE or compulsory in 3rd semester.
- 5) Software Engineering must be included in System Analysis and Design in 6th semester and rename as Software Engineer.
- 6) Lab marks must be reflected in the marksheet in NEP.

- 7) More effort must be given in core subjects rather than in GE.

Motion of the Meeting:

All the suggestions from the members have been duly noted down and required changes will be incorporated in the course structure. The curriculum will be changed as per the decision taken by the School Board in BOS meeting which will be rectified in the upcoming Academic Council Meeting to be held on 29th December, 2022.



THE ASSAM

ROYAL GLOBAL UNIVERSITY

(Under Section 2(f) of UGC Act 1956)

Ref. No. RGU/BoS/2022-23/04-21

Date: 24/04/2023

To,
Mr. Anoop Kr Prasad
Software Engineer
Capgemini

Subject- Intimation regarding nomination as external expert (Industry) and to attend the meeting of Board of Studies (School Board) of Royal School of Information Technology (RSIT).

Dear Sir,

Greetings from The Assam Royal Global University!

We are pleased to have you as a nominated external expert (Industry) of the Board of Studies (School Board) of Royal School of Information Technology (RSIT).

I take the privilege to intimate you that the meeting of Board of Studies (School Board) of Royal School of Information Technology (RSIT) is scheduled on 24th April 2023 at The Assam Royal Global University, Guwahati from 12 pm onwards.

I request your good self to kindly accept the invitation and attend the meeting and provide your valued guidance.

Looking forward for your acceptance and gracious presence.

Sincerely yours

Dr Diganta Munshi
Registrar
The Assam Royal Global University
Registrar
The Assam Royal Global University
Guwahati



THE ASSAM

ROYAL GLOBAL UNIVERSITY

(Under Section 2(f) of UGC Act 1956)

Ref. No. RGU/BoS/2022-23/04-20

Date: 24/04/2023

To,
Prof. (Dr.) Subhrajyoti Bordoloi
HoD, Department of Computer Applications,
Assam Engineering College

Subject- Intimation regarding nomination as external expert (Academic) and to attend the meeting of Board of Studies (School Board) of Royal School of Information Technology (RSIT).

Dear Sir,

Greetings from The Assam Royal Global University!

We are pleased to have you as a nominated external expert (Academic) of the Board of Studies (School Board) of Royal School of Information Technology (RSIT).

I take the privilege to intimate you that the meeting of Board of Studies (School Board) of Royal School of Information Technology (RSIT) is scheduled on 24th April 2023 at The Assam Royal Global University, Guwahati from 12 pm onwards.

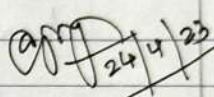
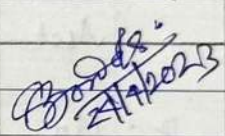
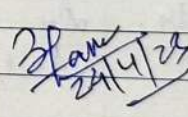
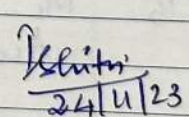
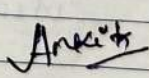
I request your good self to kindly accept the invitation and attend the meeting and provide your valued guidance.

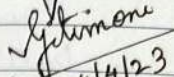
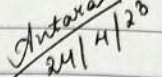
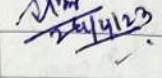
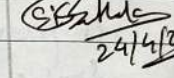
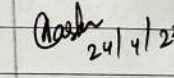
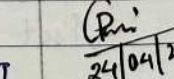
Looking forward for your acceptance and gracious presence. 🙏

Sincerely yours

Dr Diganta Munshi
Registrar
The Assam Royal Global University
Registrar
The Assam Royal Global University
Guwahati

The Assam Royal Global University
 8th Meeting of the Board of Studies (BOS)
 Royal School of Information Technology
 Date: 24/04/23
 Venue:- A-202

Sl.No.	Chairperson	Signature
1.	Prof. (Dr.) Ankur Garguly Dean Academics and Dean IC, RSET & RSIT, RGU	 24/4/23
	Expert (Academic)	
2.	Dr. Subhojyoti Boraloi Professor, Department of Computer Applications, Assam Engineering College, Jalukbari, Guwahati-781013	 24/4/23
	Members	
3.	Dr. Arupam Das Associate Professor, Dept. of CSE & RSIT (Coordinator)	 24/4/23
4.	Dr. Ishita Chakraborty Associate Professor & Coordinator, Dept. of CSE, RSET	 24/4/23
5.	Moon Moon Ahmed Assistant Manager (Academic), RGU	- Absent -
6.	Ms. Ankita Goyal Aganwale Asst. Professor, Dept. of CSE, RGU	
7.	Mr. Saurabh Sutradhar Asst. Professor, Dept. of CSE, RGU	ABSENT

Sl. No	Members	Signature
8.	Ms. Gitimoni Talukdar Asst. Professor, Dept. of CSE, RSET	 24/4/23
9.	Ms. Antara Malakar Asst. Professor, Dept. of CSE, RSET	 24/4/23
10.	Dr. Samarjit Das Associate Professor, Dept. of CSE, RSET	 24/4/23
11.	Mr. Nayan Tyoti Kalita Asst. Professor, Dept. of CSE, RSET	ABSENT
12.	Mr. Spandan Kr. Bonthakur Asst. Professor, Dept. of CSE, RSET	 24/4/23
13.	Ms. Aparna Laskar Asst. Professor, Dept. of CSE, RSET	 24/4/23
14.	Dr. Sumi Karghara Dewan Asst. Professor, Dept. of CSE, RSET	ABSENT
15.	Ms. Nilakshi Deka Asst. Professor, Dept. of CSE, RSET	ABSENT
16.	Dr. Genajit Hussain Asst. Professor, Dept. of CSE, RSET	ABSENT
17.	Ms. Meghna Saikia Asst. Professor, Dept. of CSE, RSET	ABSENT
18.	Ms. Pallabi Goswami Asst. Professor, Dept. of CSE, RSET	 24/04/2023

Expert (Industry)

19. Mr. Anoop Kumar Prasad
Software Engineer, Copgemini
Researcher, Fellow of Esig

Online
Present

Invitee

20. Prof. (Dr.) Anrab Sarma
Hod, Dept. of CE, RSET

Patent

21. Dr. Karan Debnath
Associate Professor, Dept. of Maths, RSAPS

22. Dr. Bimalendu Kalita
Associate Professor, Dept. of Maths, RSAPS

Present

Member Secretary

23. Dr. Meganta Munshee
Registrar, The Assam Royal
Global University

Meganta Munshee
21/4/23

MINUTES OF THE MEETING
8th BOARD OF STUDIES
ROYAL SCHOOL OF INFORMATION TECHNOLOGY (RSIT)

Date: 24/04/2023

Time: 12:30 PM onwards

Venue: A-202

Agenda of the Meeting: Review of the Course Structure & Syllabi of the proposed subjects of the final year of BCA & B. Sc. (IT).

Attendees Present:

Dr. Subhrajyoti Bordoloi, Professor & HoD, Department of Computer Applications, Assam Engineering College, Academic Expert, BOS
Dr. Diganta Munshi, Registrar, RGU
Prof. (Dr.) Ankur Ganguly, Dean (i/c) RSET RSIT, RGU
Mr. Anoop Kumar Prasad, Software Engineer, Capgemini, Industry Expert
Dr. Anupam Das, Associate Professor, Coordinator (RSIT)
Dr. Ishita Chakraborty, Associate Professor, Coordinator Dept. of CSE
Dr. Samarjit Das, Associate Professor, Dept. of CSE
Ms. Gitimoni Talukdar, Assistant Professor, Dept. of CSE
Ms. Antara Malakar, Assistant Professor, Dept. of CSE
Ms. Ankita Goyal Agarwal, Assistant Professor, Dept. of CSE
Mr. Spandan Kumar Barthakur, Assistant Professor, Dept. of CSE
Ms. Afsana Laskar, Assistant Professor, Dept. of CSE
Ms. Pallabi Goswami, Assistant Professor, Dept. of CSE

Remarks for BCA

Hon'ble expert Dr. Subhrajyoti Bordoloi along with Dr. Diganta Munshi, Registrar, RGU and Prof. (Dr.) Ankur Ganguly, Dean (i/c), RSET & RSIT, Dean (Academics), RGU suggested the following changes:

5th Semester:

- 1) Minor project to be renamed as Project-I with credit structure L-T-P-C as 0-0-12-6.

6th Semester:

- 1) **Artificial Intelligence** paper under Department Specific Core (DSC) to be replaced by Project-II with credit structure L-T-P-C as 0-0-8-4.
- 2) The practical component for "**Software Engineering**" can be conducted using a simulator. **Rational Rose** software may be utilized or acquired for this purpose.
- 3) The DSE-IV paper titled "**Introduction to Embedded Systems**" is set to be substituted with **Artificial Intelligence**.
- 4) The paper **Artificial Intelligence** to be renamed as "**Introduction to Artificial Intelligence**".
- 5) Honorable board suggested to revise the **Cryptography and Network Security** syllabus by dividing the first two modules into four modules and exclude the Network Security component
- 6) Syllabus of **Introduction to Natural Language Processing** under DSE-VII can be altered and made simple.

Remarks for B. Sc. (IT):

5th Semester:

- 1) Minor project to be renamed as Project-I with credit structure L-T-P-C as 0-0-12-6.

6th Semester:

- 1) **Theory of Computation** paper under Department Specific Core (DSC) to be replaced by **Project-II** with L-T-P-C as 0-0-8-4.
- 2) The rest of the suggestions remains same as for BCA.

Other Comments:

- 1) The board proposed that the internship should be undertaken following the even semester and assessed in the ensuing odd semester.
- 2) The **Project-I** chosen in the 5th semester should be of sufficient magnitude to be continued into the 6th semester as **Project-II**.
- 3) Subjects offered for other schools under Skill Enhancement Courses (SEC) and Generic Electives (GE) to be listed in a separate annexure.

Motion of the Meeting:

All of the recommendations provided by the members have been recorded, and the necessary modifications will be included in the course framework. The curriculum will be revised in accordance with the decision made by the School Board during the BOS meeting, which will be finalized in the upcoming Academic Council Meeting scheduled for 26th April, 2023.



THE ASSAM

ROYAL GLOBAL UNIVERSITY

(Under Section 2(f) of UGC Act 1956)

Date: 12/12/2023

To,
Mr. Anoop Kr Prasad
Software Engineer
Capgemini

Subject- Intimation regarding nomination as external expert (Industry) and to attend the meeting of Board of Studies (School Board) of Royal School of Information Technology (RSIT).

Dear Sir,

Greetings from The Assam Royal Global University!

We are pleased to have you as a nominated external expert (Industry) of the Board of Studies (School Board) of Royal School of Information Technology (RSIT).

I take the privilege to intimate you that the meeting of Board of Studies (School Board) of Royal School of Information Technology (RSIT) is scheduled on 13th December 2023 at The Assam Royal Global University, Guwahati from 3 pm onwards.

I request your good self to kindly accept the invitation and attend the meeting and provide your valued guidance.

Looking forward for your acceptance and gracious presence.

Sincerely yours

Dr Diganta Munshi
Registrar
The Assam Royal Global University

Dr. Diganta Munshi
Registrar
The Assam Royal Global University
Guwahati



THE ASSAM

ROYAL GLOBAL UNIVERSITY

(Under Section 2(f) of UGC Act 1956)

Date: 12/12/2023

To,
Prof. (Dr.) Subhrajyoti Bordoloi
HoD, Department of Computer Applications,
Assam Engineering College

Subject- Intimation regarding nomination as external expert (Academic) and to attend the meeting of Board of Studies (School Board) of Royal School of Information Technology (RSIT).

Dear Sir,

Greetings from The Assam Royal Global University!

We are pleased to have you as a nominated external expert (Academic) of the Board of Studies (School Board) of Royal School of Information Technology (RSIT).

I take the privilege to intimate you that the meeting of Board of Studies (School Board) of Royal School of Information Technology (RSIT) is scheduled on 13th December 2023 at The Assam Royal Global University, Guwahati from 3 pm onwards.

I request your good self to kindly accept the invitation and attend the meeting and provide your valued guidance.

Looking forward for your acceptance and gracious presence.

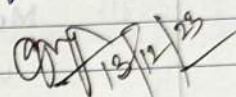
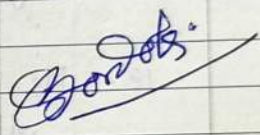
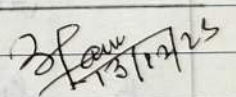
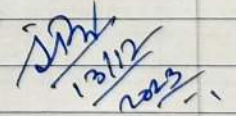
Sincerely yours

Dr Diganta Munshi
Registrar
The Assam Royal Global University

Dr. Diganta Munshi
Registrar
The Assam Royal Global University
Guwahati

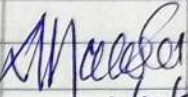
□ □ □ □ □ □ □ □

The Assam Royal Global University
 9th Meeting of the Board of Studies (BOS)
 Royal School of Information Technology (RSIT)
 Date: 13/12/23
 Venue: A02

Sl. No.	Chairperson	Signature
1.	Prof. (Dr.) Ankur Garguly Dean Academics and Dean (i/c), RSET & RSIT RGU	 13/12/23
Expert (Academic)		
2.	Dr. Subhrajyoti Bordoloi Professor, Department of Computer Applications, Assam Engineering College, Jalukbari, Guwahati	 Bordoloi
Members		
3.	Dr. Anupam Das Associate Professor, & HOD, RSIT	 Anupam Das 13/12/23
4.	Dr. Jibita Chakraborty Associate Professor & HOD, Dept. of CSE	
5.	Dr. Samarjit Das Associate Professor, Dept. of CSE	 Samarjit Das 13/12/23
6.	Dr. Rashel Sarika Associate Professor, Dept. of CSE	
7.	Dr. Luri Kangkand Dewan Assistant Professor, Dept. of CSE	
8.	Ms. Antara Malakar Assistant Professor, Dept. of CSE	

JIMMY

Sl. No	Members	Signatures
9.	Mr. Nayan J. Kalite Assistant Professor, Dept. of CSE	
10.	Mr. Saurabh Sutraadhar Assistant Professor, Dept. of CSE	Saurabh Sutraadhar 13.12.23
11.	Ms. Ankita Goyal Agarwala Assistant Professor, Dept. of CSE	
12.	Ms. Nilakshi Deka Assistant Professor, Dept. of CSE	
13.	Ms. Afsana Laskar Assistant Professor, Dept. of CSE	Afsana Laskar 13.12.23
14.	Mr. Spandan Kr. Bonthakur Assistant Professor, Dept. of CSE	Spandan Kr. Bonthakur 13/12/23
15.	Dr. Farafil Hussain Assistant Professor, Dept. of CSE	
16.	Ms. Meghna Saitia Assistant Professor, Dept. of CSE	Meghna Saitia 13/12/23
Expert (Industry)		
17.	Mr. Anoop Kr. Prasad Founders & Contributors Planetary Digital Peace	
Invitee		
18	Dr. Karal Debrata Associate Professor & HOD Dept. of Mathematics, RSAPS	Karal Debrata 13/12/2023

Sl.No	Invitee	Signature
19.	Dr. Bimalendu Kalita Associate Professor, Dept. of Mathematics	
	Member Secretary	
20.	Dr. Diganta Munshi Registrar, The Assam Royal Global University	 13/12/23

MSc.IT (AY 2017-18)

Programme Structure

1st semester							
Sl. No.	Subject Code	Names of subjects	L	T	P	C	TCP
Core Subjects (3+3+3+3+3+2+2+2+2=23 credits)							
1	INT054101	Web Technologies	2	1	0	3	3
2	INT054102	Theory of Computations	2	1	0	3	3
3	INT054103	Advanced Data Structures	2	1	0	3	3
4	INT054104	Object Oriented Programming and Design	2	1	0	3	3
5	INT054105	Advanced COA	2	1	0	3	3
6	INT054116	Web Technologies Lab	0	0	4	2	4
7	INT054117	Computer Hardware Lab	0	0	4	2	4
8	INT054118	Data Structures Lab	0	0	4	2	4
9	INT054119	OOPD Lab	0	0	4	2	4
Employability and Personality Enhancement Courses (EPEC)*(1+2+3+1 = 7 credits)							
8	CEN994101	Communication: skills, concepts & applications	1	0	0	1	1
9	FLG994102	Foreign Language - I**	2	0	0	2	2
10	ILD994103/ EVS994103	India - land of Diversity	3	0	0	3	3
11	BHS994104	Elements of Behavioral Science	1	0	0	1	1
2nd semester							
Sl. No.	Subject Code	Names of subjects	L	T	P	C	TCP
Core Subjects (4+4+4+3+3+2+2+2+2=26 credits)							
1	INT054201	Computer Networks	3	1	0	4	4
2	INT054202	Operating Systems	3	1	0	4	4
3	INT054203	Advanced Database Management Systems	3	1	0	4	4
4	INT054204	Computer Graphics	2	1	0	3	3
5	INT054205	Multimedia Theory and Applications	2	1	0	3	3
6	INT054216	Computer Networks Lab	0	0	4	2	4
7	INT054217	Operating Systems Lab	0	0	4	2	4
8	INT054218	Advanced DBMS Lab	0	0	4	2	4
9	INT054219	Graphics & Multimedia Lab	0	0	4	2	4
Employability and Personality Enhancement Courses (EPEC)*(1+2+1 = 4 credits)							
7	CEN994201	Business Environment & Communication	1	0	0	1	1
8	FLG994202	Foreign Language - II**	2	0	0	2	2
9	ILD994203/ EVS994203	Community Service Camp	-	-	-	-	-
10	BHS994204	Development of Individuals and Behavioral Skills	1	0	0	1	1

Note:

* These are compulsory subjects and scores/grades will be awarded in the end-semester examination.

** Subject to availability of faculty members, few foreign language courses will be offered.

Aden
HOD/Coordinator
Royal School of Information & Technology
The Assam Royal Global University
Betkuchi, NH 37, Guwahati 781035

3rd semester							
Sl. No.	Subject Code	Names of subjects	L	T	P	C	TCP
Core Subjects (4+4+4+3+3+2+2+2+2=26 credits)							
1	INT054301	Design and Analysis of Algorithms	3	1	0	4	4
2	INT054302	Data Mining	3	1	0	4	4
3	INT054303	Electronic Commerce	3	1	0	4	4
4	INT054304	Research Methodology	2	1	0	3	3
5	INT05405	Data Analytics using R	2	1	0	3	3
6	INT054216	Design and Analysis of Algorithms Lab	0	0	4	2	4
7	INT054317	Electronic Commerce Lab	0	0	4	2	4
8	INT054318	R Programming Lab	0	0	4	2	4
9	INT054319	Data Mining Lab	0	0	4	2	4
Employability & Personality Enhancement Courses (EPEC)*							
10	CEN994301	Kinesics & Effective Communication	1	0	0	1	1
11	FLG994302	Foreign Language - III**	2	0	0	2	2
12	BHS994304	Self-Development and Relationship Management	1	0	0	1	1
4th semester							
Sl. No.	Subject Code	Names of subjects	L	T	P	C	TCP
Core Subjects (4+4+4+14=26 credits)							
1	INT054401	Elective-I	3	1	0	4	4
2	INT054402	Elective-II	3	1	0	4	4
3	INT054403	Elective-III	3	1	0	4	4
4	INT054424	Project	0	0	28	14	28
6	CEN994401	Advanced Corporate Communication Skills	1	0	0	1	1
7	FLG994402	Foreign Language - IV**	2	0	0	2	2
8	BHS994404	Team Work and Leadership for Excellence	1	0	0	1	1
Employability & Personality Enhancement Courses (EPEC)*							
9	CEN994401	Advanced Corporate Communication Skills	1	0	0	1	1
10	FLG994402	Foreign Language - IV**	2	0	0	2	2
11	BHS994404	Team Work and Leadership for Excellence	1	0	0	1	1

Note:

* These are compulsory subjects and scores/grades will be awarded in the end-semester examination.

** Subject to availability of faculty members, few foreign language courses will be offered.


 HOD/Coordinator
 Royal School of Information & Technology
 The Assam Royal Global University
 Borjuchi, NH 37, Guwahati 781035

M. Sc. IT (AY 2018-19)

Programme Structure

1st semester								2nd semester							
Sl. No.	Subject Code	Names of subjects	L	T	P	C	TC P	Sl. No.	Subject Code	Names of subjects	L	T	P	C	TC P
Core Courses (CC)								Core Courses (CC)							
1	INT054C101	Advanced Database Management Systems	4	0	0	4	4	1	INT054C201	Computer Networks	4	0	0	4	4
2	INT054C102	Data Structures using C++	4	0	0	4	4	2	INT054C202	Web Technologies	4	0	0	4	4
3	INT054C103	Object Oriented Programming and Design	4	0	0	4	4	3	INT054C203	Operating System Architecture	4	0	0	4	4
4	INT054C104	Advanced Computer Organisation and Architecture	4	0	0	4	4	4	INT054C204	Multimedia Theory and Applications	4	0	0	4	4
5	INT054C111	Advanced Database Management Systems Lab	0	0	2	1	2	5	INT054C211	Computer Networks Lab	0	0	2	1	2
6	INT054C112	Data Structures using C++ Lab	0	0	2	1	2	6	INT054C212	Web Technologies Lab	0	0	2	1	2
7	INT054C113	Object Oriented Programming and Design Lab	0	0	2	1	2	7	INT054C23	Operating System Architecture Lab	0	0	2	1	2
Department Specific Elective (DSE)								Department Specific Elective (DSE)							
8	INT054D10X1	Elective-I	4	0	0	4	4	9	INT054D20X2	Elective-II	4	0	0	4	4
Ability Enhancement Elective Courses (AEEC)								Ability Enhancement Elective Courses (AEEC)							
								10	CIT054S20X1	AEEC-I	2	0	0	2	2
Ability Enhancement Compulsory Courses (AECC)								Ability Enhancement Compulsory Courses (AECC)							
9	CEN984A101	Communicative English-I	1	0	0	1	1	11	CEN984A201	Communicative English-II	1	0	0	1	1
10	BHS984A103	Fundamentals of Organizational Behaviour	1	0	0	1	1	12	BHS984A203	Individual and Interpersonal Behaviour	1	0	0	1	1
		TOTAL				25	28			TOTAL				27	30

3rd semester								4th semester							
Sl. No.	Subject Code	Names of subjects	L	T	P	C	TC P	Sl. No.	Subject Code	Names of subjects	L	T	P	C	TC P
Core Courses (CC)								Core Courses (CC)							
1	INT054C301	Analysis of Algorithms	4	0	0	4	4	1	INT054C401	Data Mining	4	0	0	4	4
2	INT054C302	Compiler Design	4	0	0	4	4	2	INT054C402	Cryptography and Network Security	4	0	0	4	4
3	INT054C311	Analysis of Algorithms Lab	0	0	2	1	2								
4	INT054C312	Compiler Design Lab	0	0	2	1	2								
Department Specific Elective (DSE)								Department Specific Elective (DSE)							
5	INT054D30X3	Elective-III	4	0	0	4	4	3	INT054D40X5	Elective-V	4	0	0	4	4
6	INT054D30X4	Elective-IV	4	0	0	4	4	4	INT054D40X6	Elective-VI	4	0	0	4	4
Ability Enhancement Compulsory Courses (AECC)								Ability Enhancement Compulsory Courses (AECC)							
7	CEN984A301	Communicative English-III	1	0	0	1	1	5	CEN984A401	Communicative English-IV	1	0	0	1	1
Ability Enhancement Elective Courses (AEEC)								Ability Enhancement Elective Courses (AEEC)							
8	CIT054S30X2	AEEC-II	2	0	0	2	2								
Project Dissertation								Project Dissertation							
9	INT054C326	Minor Project	0	0	8	4	8	6	INT054C425	Major Project	0	0	16	8	16
		TOTAL				25	31			TOTAL				25	34

SEMESTER	CREDITS
I	25
II	27
III	25
IV	25

TOTAL CREDITS = 102

ADell
HOD/Coordinator
Royal School of Information & Technology
The Assam Royal Global University
Betkuchi, NH 37, Guwahati 781035

LIST OF DEPARTMENT SPECIFIC ELECTIVES			
Elective No	Sl. No	Subject Code	Name of the Elective
I	1	INT054D1011	Theory of Computation
	2	INT054D1021	Graph Theory
II	1	INT054D2012	Management Information System
	2	INT054D2022	Optimisation Techniques
III	1	INT054D3013	Distributed Operating Systems
	2	INT054D3023	Artificial Intelligence
IV	1	INT054D3014	Cloud Computing
	2	INT054D3024	Mobile Computing
V	1	INT054D4015	Digital Image Processing
	2	INT054D4025	Wireless Sensor Networks
VI	1	INT054D4016	Mobile Application Development
	2	INT054D4026	Python Programming

SUBJECTS UNDER AEEC			
AEEC No	Sl. No	Subject Code	Name of the Elective
I	1	CIT054S2011	Fundamentals of Computer Science
	2	CIT054S2021	Introduction to Computing
II	1	CIT054S3012	Programming using MATLAB
	2	CIT054S3022	Text Editing Tool


 HOD/Coordinator
 Royal School of Information & Technology
 The Assam Royal Global University
 Batabuchi, NH 37, Guwahati 781035

BCA (AY-2017-18)

Programme Structure

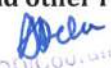
1st semester							
Sl.No.	Subject Code	Names of subjects	L	T	P	C	TCP
Core Subjects (3+3+3+3+1+1=14 credits)							
1	CAP052101	Introduction to C Programming	2	1	0	3	3
2	CAP052102	PC Software	2	1	0	3	3
3	CAP052103	Fundamentals of Computer Science	2	1	0	3	3
4	MAT052104	Mathematics-I	2	1	0	3	3
5	CAP052115	C Programming Lab	0	0	2	1	2
6	CAP052116	PC Software Lab	0	0	2	1	2
Employability and Personality Enhancement Courses (EPEC)*(1+2+3+1+1+3 = 11 credits)							
9	CEN992101	Developing Oral Communication & Listening Skills	1	0	0	1	1
10	FLG992102	Foreign Language - I**	2	0	0	2	2
11	EVS992103/ ILD992103	Environmental Science / India - land of Diversity	3	0	0	3	3
12	PHE992114	Physical Education - I	0	0	2	1	2
13	BHS992105	Concepts of Behavioral Science	1	0	0	1	1
14	BSK982146	Basket Course (may lead to minor track if chosen from same domain in different semesters) ***	--			3	--
2nd semester							
Sl.No.	Subject Code	Names of subjects	L	T	P	C	TCP
Core Subjects (3+3+3+3+1+1=14 credits)							
1	CAP052201	Introduction to Digital Systems	2	1	0	3	3
2	CAP052202	Principles of Management	2	1	0	3	3
3	MAT052203	Mathematics-II	2	1	0	3	3
4	CAP052204	Data Structures	2	1	0	3	3
5	CAP052215	Data Structures Lab	0	0	2	1	2
6	CAP052216	Digital Systems Lab	0	0	2	1	2
Employability and Personality Enhancement Courses (EPEC)*(1+2+3+1+1+3 = 11 credits)							
9	CEN992201	Conversation & Public Speaking	1	0	0	1	1
10	FLG992202	Foreign Language - II**	2	0	0	2	2
11	ILD992203/ EVS992203	India - land of Diversity / Environmental Science	3	0	0	3	3
12	PHE992214	Physical Education - II	0	0	2	1	2
13	BHS992205	Understanding Self and Others	1	0	0	1	1
14	BSK982246	Basket Course (may lead to minor track if chosen from same domain in different semesters) ***	--			3	--

Note:

* These are compulsory subjects and scores/grades will be awarded in the end-semester examination.

** Subject to availability of faculty members, few foreign language courses will be offered.

*** These courses will be offered subject to availability of faculty members and other resources


 HOD/Courser
 Royal School of Information & Technology
 The Assam Royal Global University
 Borakuchi, NH 37, Guwahati 781035

3rd semester								
Sl. No.	Subject Code	Names of subjects	L	T	P	C	TCP	
Core Subjects (3+3+3+3+2+2=16 credits)								
1	CAP052301	Computer Oriented Numerical Methods	2	1	0	3	3	
2	CAP052302	System Software	2	1	0	3	3	
3	CAP052303	Programming in Visual Basic	2	1	0	3	3	
4	SOC052304	Introduction to Sociology	2	1	0	3	3	
5	CAP052315	Computer Oriented Numerical Methods Lab	0	0	4	2	4	
6	CAP052316	Visual Basic Lab	0	0	4	2	4	
Employability and Personality Enhancement Courses (EPEC)*(1+2+3+1+1 = 8 credits)								
9	CEN992301	Career Oriented Communication	1	0	0	1	1	
10	FLG992302	Foreign Language - III**	2	0	0	2	2	
11	BHS992303	Understanding Problems and Innovative Solutions	1	0	0	1	1	
12	BSK982344	Basket Course (may lead to minor track if chosen from same domain in different semesters) ***	--			3	--	
4th semester								
Sl. No.	Subject Code	Names of subjects	L	T	P	C	TCP	
Core Subjects (3+3+3+3+2+2=16 credits)								
1	CAP052401	Computer Oriented Financial Accounting	2	1	0	3	3	
2	CAP052402	OOP using C++	2	1	0	3	3	
3	CAP052403	Computer Organization and Architecture	2	1	0	3	3	
4	CAP052404	Introduction to Operating Systems	2	1	0	3	3	
5	CAP052415	Computer Oriented Financial Accounting Lab	0	0	4	2	4	
6	CAP052416	OOP using C++ Lab	0	0	4	2	4	
Employability and Personality Enhancement Courses (EPEC)*(1+2+1+1+3 = 8 credits)								
9	CEN992401	Communication & Presentation Skills	1	0	0	1	1	
10	FLG992402	Foreign Language - IV**	2	0	0	2	2	
11	BHS992403	Team Building, Group Dynamics and Leadership	1	0	0	1	1	
12	BSK982444	Basket Course (may lead to minor track if chosen from same domain in different semesters) ***	--			3	--	

Note:

* These are compulsory subjects and scores/grades will be awarded in the end-semester examination.

** Subject to availability of faculty members, few foreign language courses will be offered.

*** These courses will be offered subject to availability of faculty members and other resources


 HOD/Coordinator
 Royal School of Information & Technology
 The Assia Royal Global University
 Building, 101/37, Guntaheri 781055

5th semester							
Sl. No.	Subject Code	Names of subjects	L	T	P	C	TCP
Core Subjects (3+3+3+3+1+1=16 credits)							
1	CAP052501	Core Java Programming	2	1	0	3	3
2	CAP052502	Introduction to Database Management Systems	2	1	0	3	3
3	CAP052503	Introduction to Computer Networks	2	1	0	3	3
4	CAP052504	Introduction to Open Source Technologies	2	1	0	3	3
5	CAP052515	DatabasLab Management Systems Lab	0	0	4	2	4
6	CAP052516	Java and Computer Networks Lab	0	0	4	2	4
Employability & Personality Enhancement Courses (EPEC)*							
9	CEN992501	Ethics and Business Communication	1	0	0	1	1
10	FLG992502	Foreign Language - V**	2	0	0	2	2
11	BHS992503	Stress Management	1	0	0	1	1
12	BSK982544	Basket Course (may lead to minor track if chosen from same domain in different semesters) ***	--			3	--
6th semester							
Sl. No.	Subject Code	Names of subjects	L	T	P	C	TCP
Core Subjects (3+3+3+7=16 credits)							
1	CAP052601	Introduction to Software Engineering	2	1	0	3	3
2	CAP052602	Introduction to Web Design	2	1	0	3	3
3	CAP052603	Elective-I	2	1	0	3	3
4	CAP052624	Project	0	0	14	7	14
Employability & Personality Enhancement Courses (EPEC)*							
7	CEN992601	Effective Workplace Communication	1	0	0	1	1
8	FLG992602	Foreign Language - VI**	2	0	0	2	2
9	BHS992603	Relationship Management and Behavioral Communication	1	0	0	1	1
10	BSK982604	Basket Course (may lead to minor track if chosen from same domain in different semesters) ***	--			3	--

Note:

* These are compulsory subjects and scores/grades will be awarded in the end-semester examination.

** Subject to availability of faculty members, few foreign language courses will be offered.

*** These courses will be offered subject to availability of faculty members and other resources


 HOD/Coordinator
 Royal School of Information & Technology
 The Asia Royal Global University
 Building: 124 37, Bangalore 781035

BCA (2018-19)

Program Structure

1st SEMESTER								2nd SEMESTER							
Sl. No.	Subject Code	Names of subjects	L	T	P	C	TC P	Sl. No.	Subject Code	Names of subjects	L	T	P	C	TC P
Core Courses (CC)								Core Courses (CC)							
1	CAP052C 101	Fundamentals of Computer Science	3	1	0	4	4	1	CAP052C 201	Computer Organization and Architecture	3	1	0	4	4
2	CAP052C 102	Introduction to C Programming	3	1	0	4	4	2	CAP052C 202	Introduction to Data Structures	3	1	0	4	4
3	CAP052C 103	Digital Logic and Computer Design	3	1	0	4	4	3	CAP052C 203	Object Oriented Programming using C++	3	1	0	4	4
4	CAP052C 112	Introduction to C Programming Lab	0	0	4	2	4	4	CAP052C 212	Introduction to Data Structures Lab	0	0	4	2	4
5	CAP052C 114	Office Automation Lab	0	0	4	2	4	5	CAP052C 213	Object Oriented Programming using C++ Lab	0	0	4	2	4
Generic Elective (GE)								Generic Elective (GE)							
6	CIT052G1 0X1	GE-I***	3	0	0	3	3	6	CIT052G2 0X3	GE-III***	3	0	0	3	3
7	CIT052G1 0X2	GE-II***	3	0	0	3	3	7	CIT052G2 0X4	GE-IV***	3	0	0	3	3
Ability Enhancement Compulsory Courses (AECC)								Ability Enhancement Compulsory Courses (AECC)							
8	BHS982A 104	Concepts of Behavioural Science	1	0	0	1	1	8	BHS982A 204	Understanding Self and Others	1	0	0	1	1
9	CEN982A 101	Developing Oral Communication and Listening Skills	1	0	0	1	1	9	CEN982A 201	Conversation and Public Speaking	1	0	0	1	1
		TOTAL				24	28			TOTAL				24	28
3rd SEMESTER								4th SEMESTER							
Sl. No.	Subject Code	Names of subjects	L	T	P	C	TC P	Sl. No.	Subject Code	Names of subjects	L	T	P	C	TC P
Core Courses								Core Courses							
1	CAP052C 301	JAVA Programming	3	1	0	4	4	1	CAP052C 401	Operating Systems	3	1	0	4	4

2	CAP052C 302	Introducti on to Database Managem ent Systems	3	1	0	4	4	2	CAP052C 402	Computer Networks	3	1	0	4	4
3	CAP052C 303	Data Communic ation	3	1	0	4	4	3	CAP052C 403	Computer Graphics and Multimedia	3	1	0	4	4
4	CAP052C 311	JAVA Programm ing Lab	0	0	4	2	4	4	CAP052C 411	Operating Systems Lab	0	0	4	2	4
5	CAP052C 312	Introducti on to Database Managem ent Systems Lab	0	0	4	2	4	5	CAP052C 413	Computer Graphics and Multimedia Lab	0	0	4	2	4
Generic Elective (GE)									Generic Elective (GE)						
6	CIT052G3 0X5	GE-V***	3	0	0	3	3	6	CIT052G4 0X7	GE-VII***	3	0	0	3	3
7	CIT052G3 0X6	GE-VI***	3	0	0	3	3	7	CIT052G4 0X8	GE-VIII***	3	0	0	3	3
Ability Enhancement Elective Courses (AEEC)									Ability Enhancement Elective Courses (AEEC)						
7	CIT052S3 0X1	AEEC-I	2	0	0	2	2	8	CIT052S4 0X2	AEEC-II	2	0	0	2	2
Ability Enhancement Compulsory Courses (AEEC)									Ability Enhancement Compulsory Courses (AEEC)						
8	EVS982A 303	Environme ntal Sciences	2	0	0	2	2	9	CEN982A 401	Communication and Presentation Skills	1	0	0	1	1
9	CEN102A 301	Career Oriented Communic ation	1	0	0	1	1								
		TOTAL				2	7			TOTAL				2	29
5th SEMESTER									6th SEMESTER						
Sl. N o.	Subject Code	Names of subjects	L	T	P	C	TC P	Sl. N o.	Subject Code	Names of subjects	L	T	P	C	TC P
Core Courses (CC)									Core Courses (CC)						
1	CAP052C 501	E- Commerce	4	0	0	4	4	1	CAP052C 601	Management Information Systems	4	0	0	4	4
2	CAP052C 502	Web Technolog y	4	0	0	4	4	2	CAP052C 602	System Analysis and Design	4	0	0	4	4
3	CAP052C 513	Web Technolog y Lab	0	0	4	2	4	3	CAP052C 613	System Analysis and Design Lab	0	0	4	2	4
Discipline Specific Elective (DSE)									Discipline Specific Elective (DSE)						
4	CAP052D 50X1	Elective I	4	0	0	4	4	4	CAP052D 60X3	Elective III	4	0	0	4	4

6.2 Semester wise Details of BCA Course & Credit Scheme

BCA
COURSE STRUCTURE (Ay-2020-21)

1 st SEMESTER							
Sl. No.	Subject Code	Names of subjects	L	T	P	C	TCP
Core Courses (CC)							
1	CAP052C101	Fundamentals of Computer Science	3	1	0	4	4
2	CAP052C102	Introduction to C Programming	3	1	0	4	4
3	CAP052C103	Digital Logic and Computer Design	3	1	0	4	4
4	CAP052C112	Introduction to C Programming Lab	0	0	4	2	4
5	CAP052C114	Office Automation Lab	0	0	4	2	4
Generic Elective (GE)							
6	INT052G10X	GE-I	3	0	0	3	3
7	INT052G10X	GE-II	3	0	0	3	3
Ability Enhancement Compulsory Courses (AECC)							
8	BHS982A10 4	Concepts of Behavioural Science	1	0	0	1	1
9	CEN982A10 1	Developing Oral Communication and Listening Skills	1	0	0	1	1
TOTAL			17	3	8	24	28
TOTAL CREDIT: 24							
2 nd SEMESTER							
Sl. No.	Subject Code	Names of subjects	L	T	P	C	TCP
Core Courses (CC)							
1	CAP052C201	Computer Organization and Architecture	3	1	0	4	4
2	CAP052C202	Introduction to Data Structures	3	1	0	4	4
3	CAP052C203	Object Oriented Programming using C++	3	1	0	4	4
4	CAP052C212	Introduction to Data Structures Lab	0	0	4	2	4
5	CAP052C213	Object Oriented Programming using C++ Lab	0	0	4	2	4
Generic Elective (GE)							
6	INT052G20X	GE-III***	3	0	0	3	3
7	INT052G20X	GE-IV***	3	0	0	3	3

Ability Enhancement Compulsory Courses (AECC)							
8	BHS982A204	Understanding Self and Others	1	0	0	1	1
9	CEN982A201	Conversation and Public Speaking	1	0	0	1	1
		TOTAL	17	3	8	24	28

TOTAL CREDIT: 24

3rd SEMESTER

Sl. No.	Subject Code	Names of subjects	L	T	P	C	TCP
Core Courses							
1	CAP052C301	JAVA Programming	3	1	0	4	4
2	CAP052C302	Introduction to Database Management Systems	3	1	0	4	4
3	CAP052C303	Graph Theory	3	1	0	4	4
4	CAP052C311	JAVA Programming Lab	0	0	4	2	4
5	CAP052C312	Introduction to Database Management Systems Lab	0	0	4	2	4

Generic Elective (GE)

6	INT052G30X	GE-V***	3	0	0	3	3
7	INT052G30X	GE-VI***	3	0	0	3	3

Ability Enhancement Elective Courses (AECC)

7	INT052S30X	AECC-I	2	0	0	2	2
---	------------	--------	---	---	---	---	---

Ability Enhancement Compulsory Courses (AECC)

8	EVS982A303	Environmental Sciences	2	0	0	2	2
9	CEN102A301	Career Oriented Communication	1	0	0	1	1
		TOTAL	20	3	8	27	31

TOTAL CREDIT: 27

4th SEMESTER

S. No.	Subject Code	Names of subjects	L	T	P	C	TCP
Core Courses							
1	CAP052C401	Operating Systems	3	1	0	4	4
2	CAP052C402	Data Communication and Networks	3	1	0	4	4
3	CAP052C403	Computer Graphics and Multimedia	3	1	0	4	4
4	CAP052C411	Operating Systems Lab	0	0	4	2	4
5	CAP052C413	Computer Graphics and Multimedia Lab	0	0	4	2	4
Generic Elective (GE)							
6	INT052G40X	GE-VII***	3	0	0	3	3

7	INT052G40X	GE-VIII***	3	0	0	3	3
Ability Enhancement Elective Courses (AECC)							
8	INT052S40X	AECC-II	2	0	0	2	2
Ability Enhancement Compulsory Courses (AECC)							
9	CEN982A401	Communication and Presentation Skills	1	0	0	1	1
		TOTAL	18	3	8	25	29

TOTAL CREDIT: 25

5th SEMESTER

S No.	Subject Code	Names of subjects	L	T	P	C	TCP
Core Courses (CC)							
1	CAP052C501	Introduction to Probability and Statistics	4	0	0	4	4
2	CAP052C502	Web Technology	4	0	0	4	4
3	CAP052C512	Web Technology Lab	0	0	4	2	4
Discipline Specific Elective (DSE)							
4	CAP052D50X	Elective I	4	0	0	4	4
5	CAP052D50X	Elective II	4	0	0	4	4
Ability Enhancement Compulsory Courses (AECC)							
6	CEN982A501	Ethics and Business Communication	1	0	0	1	1
Project Dissertation							
7	CAP052C523	Mini Project	0	0	8	4	8
		TOTAL	15	2	12	23	29

TOTAL CREDIT: 23

6th SEMESTER

S No.	Subject Code	Names of subjects	L	T	P	C	TCP
Core Courses (CC)							
1	CAP052C601	Artificial Intelligence	4	0	0	4	4
2	CAP052C602	System Analysis and Design	4	0	0	4	4
3	CAP052C612	System Analysis and Design Lab	0	0	4	2	4
Discipline Specific Elective (DSE)							
4	CAP052D60X	Elective III	4	0	0	4	4
5	CAP052D60X	Elective IV	4	0	0	4	4
Ability Enhancement Compulsory Courses (AECC)							
6	CEN982A601	Effective Workplace Communication	1	0	0	1	1
Project Dissertation							

7	CAP052C623	Major Project	0	0	12	6	12
		TOTAL	15	2	16	25	33
TOTAL CREDIT: 25							

Legend: L: Lecture Class; T: Tutorial Class; P: Practical Class: C: Total Credits

LIST OF DEPARTMENT SPECIFIC ELECTIVES			
Elective No	Sl. No	Subject Code	Name of the Elective
I	1	CAP052D501	Introduction to Data Mining
	2	CAP052D502	System Administration
II	1	CAP052D503	Introduction to Cloud Computing
	2	CAP052D504	Software Engineering
III	1	CAP052D601	Introduction to Big Data Analytics
	2	CAP052D602	Mobile Application Development
IV	1	CAP052D603	E- Commerce
	2	CAP052D604	Social Networking
		CAP052D605	Introduction to Embedded System

LIST OF SUBJECTS OFFERED UNDER AEEC			
AEEC No	SEM	Subject Code	Name of the Subject
AEEC- I	3	INT052S301	Problem Solving using C++
		INT052S302	Office Automation
		INT052S303	Quantitative Aptitude
AEEC-II	4	INT052S401	General Aptitude
		INT052S402	Logical Ability and Reasoning

LIST OF SUBJECTS OFFERED UNDER GENERIC ELECTIVES			
Elective No	SEM	Subject Code	Name of the Elective
GE-I	1	INT052G101	Introduction to Computing
GE-II		CSE052G102	Social Media Studies
GE-III	2	INT052G201	Fundamentals of Web Design
GE-IV		INT052G202	Open Source Software
		CSE052G203	Foundation of IT
GE-V	3	INT052G301	Windows Programming using C#
GE-VI		INT052G302	IPR and Cyber Law
GE-VII	4	INT052G401	Python Programming
GE-VIII		INT052G402	Fundamentals Artificial Intelligence

8. Program Structure for BCA

BCA Course Structure							
Session 2022-2023							
1 st SEMESTER							
Sl. No.	Subject Code	Names of subjects	L	T	P	C	TCP
Discipline Specific Core (DSC)							
1	CAP052C101	Fundamentals of Computer Science	3	1	0	4	4
2	CAP052C102	Introduction to C Programming	3	0	1	4	5
3	CAP052C103	Digital Logic and Computer Design	3	0	1	4	5
Generic Elective (GE)							
4	INT052G103	Web Development with JavaScript (GE-I)	3	0	0	3	3
5	INT052G104	Multimedia Tools and Applications (GE-II)	3	0	0	3	3
Ability Enhancement Compulsory Courses (AECC)							
6	CEN982A101	Developing Oral Communication and Listening Skills	1	0	0	1	1
7	BHS982A104	Concepts of Behavioural Science	1	0	0	1	1
Skill Enhancement Courses (SEC)							
8	CAP052S111	Image Editing and Animation (SEC-I)	0	0	4	2	4
Value Addition Courses (VAC)							
9	VAC992V117	Office Automation (VAC-I)	2	0	0	2	2
TOTAL						24	
2nd Semester							
Sl. No.	Subject Code	Names of subjects	L	T	P	C	TCP
Discipline Specific Core (DSC)							
1	CAP052C201	Computer Organisation and Architecture	3	1	0	4	4
2	CAP052C202	Introduction to Data Structures	3	0	1	4	5
3	CAP052C203	Object Oriented Programming using C++	3	0	1	4	5
Generic Elective (GE)							
4	INT052G201	Server-Side Programming (GE-III)	3	0	0	3	3
5	INT052G202	Introduction to Cyber Space (GE-IV)	3	0	0	3	3
Ability Enhancement Compulsory Courses (AECC)							
6	CEN982A201	Conversation and Public Speaking	1	0	0	1	1
7	BHS982A204	Understanding Self and Others	1	0	0	1	1
Skill Enhancement Courses (SEC)							
8	CAP052S211	Windows Programming using C# (SEC-II)	0	0	4	2	4
Value Addition Courses (VAC)							
9	VAC992A217	Computer Hardware and Networking (VAC-II)	0	0	4	2	4
TOTAL						24	