Government College (Autonomous) Rajahmundry

Board of Studies: 2021-22

Date: 18 October 2021

Through Virtual Conference

In obedience to the proceedings of the principal dated 14-09-2021, the Board of Studies, Department of Computer Science and Applications of Government College (Autonomous) Rajahmundry have met at 03:00 PM on 18 October 2021 through Google Meet under the Chairmanship of Sri Suneel Kumar Duvvuri, HoD, Department of Computer Science to discuss the curriculum design for the UG for the academic year 2021-22.

Agenda

1. Curriculum Design for all the Semesters
2. Designing of Course Outcomes and Course Objectives
3. Identifying /inclusion of components of Skill Development, Employability and Entrepreneurship in the curriculum
4. Additional inputs into the curriculum
5. Designing Model Question Papers and identifying potential paper setters
6. Innovative Teaching – Learning Methodology (Learner Centric)
7. Curriculum for the Certificate Courses
8. Academic activities of the Department
9. Any other proposal with the permission of the chair

Minutes of the Meeting

Before initiating the discussing on agenda, the Chairman introduced the external members and internal members to the Board. He also informed the members that the department of computer science is offering 6 programs in B.Sc (which includes M.P.Cs, M.S.Cs, M.G.Cs, G.G.Cs and B.Sc (IT), M.E.IoT), 1 program in B.Com (Computer Applications) and 1 program in B.A (E.S.CA). The Chairman also informed the members that the structure of the curriculum was changed during the previous academic year i.e., 2020-21 and same structure will be continued in the current academic year as well i.e., 2021-21 by introducing the new courses in the curriculum all the 8 programs mentioned above. He initiated the discussion on the agenda points by presenting the Draft BoS book on the Screen.

Agenda 1: Curriculum Design for all the Semesters for B.Sc, B.Com and B.A programs with Computer Science/Applications combinations.

Discussion:

In the beginning, The BoS Chairperson Mr. Suneel Kumar Duvvuri, presented the curriculum structure of B.Sc programmes (**M.P.Cs, M.S.Cs, M.G.Cs, G.G.Cs**) and also presented the list of new courses introduced in the current academic year and sought their opinion on the same.

> For Semester III - CSC157: Database Management System
> CSC157P: Database Management System Lab
>
> For Semester IV - CSC158: Object-Oriented Programming using Java
> CSC158P: Object-Oriented Programming using Java Lab
> CSC159: Operating Systems
> CSC159P: Operating Systems Lab using C/Java

While appreciating the curriculum revision the University nominee, Dr V. Persis, enquired that whether there will be any problem in the student progression to higher studies. The chairman replied that the introduced courses are more relevant to the PG entrance examinations throughout all state and central universities in India and also for IT careers. Further, the chairman also informed the members that the lab course for each program is scheduled for 3 hrs/week instead of 2 hrs mentioned in the university curriculum by exercising academic autonomy. The members also felt that the lab course needed 3 hrs/ week as it is skill-based.

The members welcomed the proposal of the introduction of new courses in B.Sc (M.P.Cs, M.S.Cs, M.G.Cs, G.G.Cs) and approved the same.

Following the discussion above, the chairman presented the curriculum structure of B.Sc (**M.E.IoT**) programme and list of new courses introduced in the current academic year and sought their opinion on the same.

> For Semester III - IOT-104: Data Communications & Computer Networks
> IOT-104P: Network Simulation Lab
>
> For Semester IV- IOT-105: RFID and Sensor Networks
> IOT-105P Network Simulation Lab using NS2/NS3
> IOT-116 Implementing IoT with Raspberry Pi
> IOT-116P Raspberry Pi Lab

The University Nominee, Dr V. Persis enquired about the other institutions in AP who are offering this program and also enquired about the nomenclature of the program in other institutions such as whether it is called B.Sc (Electronics) or B.Sc (Computer Science).

The chairman replied that it is a restructured three major B.Sc program with a combination of Mathematics, electronics and IoT. He further informed that, this combination has been taken from the compendium of restructured courses recommended by the Government of Andhra Pradesh in 2018 through Commessionerate of Collegiate Education under Job/Market oriented programs to create employability skills among the students and make them industry/market ready.

The chairman also informed that the Government College (A), Rajahmundry is the first institution to introduce this program in the entire state and now with the encouragement of Commessionerate of Collegiate Education few other colleges such as PR Government college, Kakinada, GDC, Ravulapalem etc.. in the state introduced the same. He further added that some of the students of the first batch of this program got placements in TCS through virtual placement drives.

While continuing the discussion, Dr.V.Persis, University Nominee expressed her concern about whether the component of computer science is missing in the syllabi. The chairman replied that 60 % of IoT belongs to computer science and being the program is market-oriented more hands-on and skill component is included in the syllabi and hence there won't be any problem.

The chairman proclaimed that he himself designed the curriculum for IoT for APSCHE which is being followed by various universities in the state including the Adikavi Nannaya University. The members congratulated the chairman for the same.

Dr.V.Persis, the University nominee asked about the availability of Laboratories for the IoT courses. The Chairman replied that for the II semester course the college having Arduino Boards (and Nos) in the III and IV semesters the practical's can be done through an open-source network simulator (NS-2) or through Packet Tracer as the college has the MoU with Cisco to use this proprietary software. He also added that the college is having Raspberry pi boards and 8 types of sensors to deal the practical sessions to the students.

All the members appreciated the introduction of new courses in B.Sc (M.E.IoT) and approved the same.

Consequently, the Chairman presented the course structure of B.Sc (IT) and opened the discussion on new courses introduced in the program. While answering the query made by the external members about the nomenclature of B.Sc (IT)-Hons, the Chairman replied that it

is equivalent to BCA and the students of this program are eligible for MCA and IT related Jobs.

The Chairman presented the entire course structure of B.Sc (IT) and explained to the committee that The students will study 2 Majors offered by Computer Science and 1 Minor subject by either Physics/Mathematics/Statistics in I, II, and III Semesters along with Ability Enhancement Courses.

The Chairman also informed the committee the students have a Skill Enhancement Course which is mapped to the Spoken Tutorial/NPTEL/SWAYAM. While progressing the conversation, the chairman explained the problems faced with the external exam of said MOOCs platforms and their synchronization with the timetable and he appealed to the members about internal assessment for the same instead of external assessment by MOOCs platform. The Subject expert, Mr. R V Satyanarayana expressed his nod to internal assessment if the external exam timetable is not synchronized. The University nominee, Dr. V Persis suggested that do not rely on only one better focus on both internal and external exams. She suggested 30 Marks external Assessment by College, 10 for Internal Assessment, and 10 for those who got certificates from the MOOC portal. In case the external MOOC exam is not synchronized with the timetable the students will be assessed for 40 Marks. After a thorough discussion on the same, the board members agreed to conduct the assessment in College.

All the members gave their consent to the course structure and the introduction of new courses in B.Sc (IT) and approved the same and also resolved to conduct a 30 Marks MCQs external assessment by the College, 10 Marks for Internal assessment by the Course Coordinator, and 10 for the recipient of the certificate from the MOOCs portal for Skill Enhancement Course.

Subsequently, the chairman presented the curriculum structure of B.Com (Computer Applications) programme and list of new courses introduced in the current academic year and sought their opinion on the same.

> For Semester III – CAP-170: Programming with C and C++
>
> For Semester IV- CAP-171: Database Management Systems

The members approved the proposal of the introduction of new courses in B.Com (Computer Applications).

Later, the Chairman shared Curriculum which was planned for B.A (Computer Applications) on the screen and invited the members for discussion on the same. Dr. V. Persis, University Nominee and E. Jyothikiranmayi, Subject expert asked about the combinations of subjects of

that programme. The Chairman replied that, it is a unique program with the combination of Economics and Statistics. He also added that, it is more relevant course for Assistant Statistical Officers posts. After a thorough discussion on the courses offering in each semester, all the members expressed their concern for the courses.

Resolutions:

It is resolved to approve the introduction of new courses introduced in B.Sc (M.P.Cs, M.S.Cs, M.G.Cs, G.G.Cs), B.Sc (M.E.IoT), B.Sc (IT), B.Com (CA), B.A(C.A).

Agenda 2: Designing of Course Outcomes and Course Objectives

Discussion:

The BoS Chairperson Mr. Suneel Kumar Duvvuri, informed the board about the Outcomes and Objectives of each course. The Board spent considerable amount of time and unanimously approved the Course outcomes of all courses.

Resolutions:

All the Course Outcomes are Approved as framed in the BoS

Agenda 3: Identifying /inclusion of components of Skill Development, Employability and Entrepreneurship in the curriculum

Discussion:

The members present discussed about the Skill development and Employability and Entrepreneurship components in the curriculum keeping in view of demand for the Job/Market oriented programs by the students. The members agreed in view of scope for enriching the student's knowledge and its applicability.

Resolutions:

It is resolved to approve the inclusion of components of Skill Development, Employability and Entrepreneurship in the curriculum

Agenda 4: Additional inputs into the curriculum

Discussion:

The members present discussed about the Additional inputs to the curriculum and approved to add some additional inputs for courses.

Resolutions:

It is resolved to approve the Additional inputs added to the curriculum.

Agenda 5: Designing Model Question Papers and identifying potential paper setters

Discussion:

The members of BoS identified subject experts and prepared a list of examiners as well as paper setters for Semester End Examinations. The Board also discussed about the Blue print of the Question papers for SEE.

Resolutions:

It is resolved to approve the list of examiners and paper setters for the Academic year 2021-22.

It is also resolved to approve the Blue print of the Question papers.

Agenda 6: Innovative Teaching – Learning Methodology (Learner Centric)

Discussion:

The Chairman, Mr. Suneel Kumar duvvuri, updated the board about innovativeness of the Curriculum and he added that the topics in each course aligned to one of the Skill Development, Employability and Entrepreneurship components and the same highlighted with the respective colours. He further informed that for each course an identified NPTEL/SWAYAM course weblink also provided for the students in the BoS document for reference. He notified the board about the implementation of virtual labs for practical courses. The chairman mooted that all the practical courses are mapped to virtual labs and a QR code was provided in the BoS document so that the students will get more practical knowledge and he sought the opinion of the members on the same. The Internal and External subject experts appreciated the innovativeness and approved.

Resolutions:

It is resolved to approve the Innovative Teaching – Learning Methodology as proposed in BoS

Agenda 7: Curriculum for the Certificate Courses

Discussion:

The members Mr Narsinga Rao and D. Seetha Ramulu proposed "Computer Hardware and Networking" Certificate course for the academic year 2021-22. The other member Mr R V Rajasekhar proposed "Graphic design through DTP" as another certificate course. Another member Mr H. Devaraj proposed "Office Automation" Certificate course as it is essential and more useful for non-computer science students. The Board gone through all the proposals and agreed to offer all the three certificate courses for the academic year 2021-22

Resolutions:

It is resolved to approve the three new certificate courses namely *Graphic design through DTP, Office Automation, Computer Hardware and Networking* for the Academic year 2021-22.

Agenda 8: Academic activities of the Department

Discussion

The members of the Board decided to organize workshops, Seminars, Guest/Extension Lectures, observation of important days and internships for the students. The Chairman proposed the following days to observe for the academic year 2021-22

S.No	Date	Events Planned
1	Nov 30, 2021 **International Computer Security Day**	Crack the Code, Code Hackathon, Poster Presentation
2	Dec 2, 2021 **World Digital Literacy Day**	Awareness programs at nearby villages/schools about digital Literacy
3	Jan 28,2022 **Data Protection Day**	PPT Competitions, Seminars
4	Feb 28,2022 **National Science Day**	Technical Seminars, Events and Competitions
5	In March-2022	National Seminar/Webinar on Data Science

The University Nominee suggested observing the Engineers Day also.

Resolutions:

It is resolved to organize and observe the important days proposed in BoS for the Academic year 2021-22.

Any other proposal with the permission of the chair

1. Community Service Project for Students

The Chairman Mr Suneel Kumar Duvvuri intimated the board that the students should complete a Community based service project as per the revised curriculum structure during their 2nd and 3rd semester interval and he requested the members for suggesting the topics for Community Service Project. While answering to the formation of students club by University nominee, the chairman replied that the department of computer science have e-club and the members of this club are very active in all the IT activities of the college. The members present suggested the following topics for community service project

- Implement a social media campaign on environmental sustainability.
- Record audio versions of public domain books for NGOs working in disability.
- Teach Digital Literacy to underprivileged communities, including women.
- Teach how to use digital tools like Google Classroom to high school and college students from government schools.
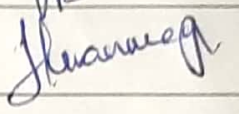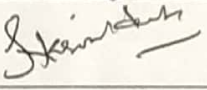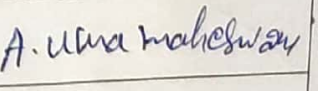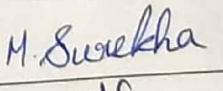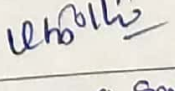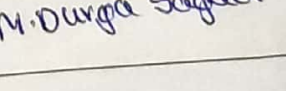
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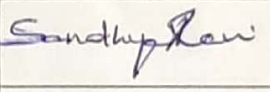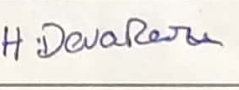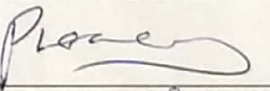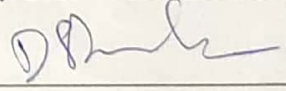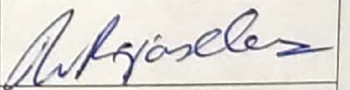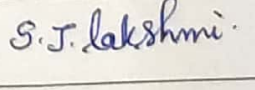
It is resolved to approve the suggested topics for Community Service Projects for the Academic year 2021-22.

Finally, the Chairman thanked all the internal subject experts of the department especially Smt U. Sandhya Rani and H. Devaraju for their effortless support in preparing the document and also thanked the University nominee Dr. V Persis and External Subject Experts Mr R V Satyanarayana, Smt.E.Jyothi Kiranmayi, Indistrial Nominee Mr Narendra Mohan for their valuable suggestions and feedback on shaping the document for better interest of student community. There being no other matter, the meeting was concluded with a vote of thanks by the chair.

GOVERNMENT COLLEGE (AUTONOMOUS), RAJAHMUNDRY

(Accredited by NAAC with "A+" Grade)

DEPARTMENT OF COMPUTER SCIENCE & APPLICATIONS

CONSOLIDATED REPORT OF BOARD OF STUDIES FOR THE YEAR 2021-22

The Meeting Board of Studies of Computer Science & Applications department was convened on _____ under the Chairmanship of Mr. Suneel Kumar Duvvuri Head / Lecturer-in-charge of Department of Computer Science and Applications.

The following members are present

S.No.	Name	Designation	Signature
1.	Dr. V. Persis	University Nominee	
2.	Smt. E. Jyothi Kiranmayi	Local Nominee	
3.	Mr. R V Satyanarayana	Local Nominee	R.V. Satyanarayane
4.	Sri S. Narendra Krishna Mohan	Industrial Nominee	
5.	Smt U Sandhya Rani	Faculty Member	Sandhya Rani
6.	Mr Devaraju Hanumanthu	Faculty Member	H Devaraju
6.	Sri P. Narasinga Rao	Faculty Member	
7.	Sri. D. Seetha Ramulu	Faculty Member	
8.	Sri R.V. Raja Sekhar	Faculty Member	
9.	Sri K.Ramesh	Faculty Member	
10.	Kum S.Jaya Lakshmi	Faculty Member	S.J. lakshmi.
11.	Smt A. UmaMaheswari	Faculty Member	A. uma maheswari
12.	Smt M.Surekha	Faculty Member	M. Surekha
13.	Kum V.Jyothsna	Faculty Member	
16.	Mr. M. Durga Sagar	Student	M.Durga Sagar

The following documents are submitted to the Academic coordinator and Controller of Examinations:

- Resolutions of Board of Studies Meeting.
- Syllabus of All semesters under CBCS pattern for All UG Computer Science Programmes.
- Model Question Papers for All semesters under CBCS pattern
- List of Revised Examiners (if any)
- Any other new proposals.

Date:

Chairman
Board of Studies
Department of Computer Science & Applications