



1.1 Curriculum Design and Development

1.1.2 Electronics – Board of Studies

DEPARTMENT OF ELECTRONICS

MINUTES OF THE BOARD OF STUDIES MEETING – MAY 2021

DATE: 18-05-2021

TIME: 03.00 pm

Board Members

1. Dr. B. Kanickairaj (Chairman)
2. Dr. S. Kalidass (University Representative)
3. Dr. John Bosco Balaguru (Academic Expert)
4. Mr. Sathyan kaliyamoorthy (Industrial Expert)
5. Mr. R. Gowshik (Student Representative)
6. Mr. A. Arputharaj (Member)
7. Mr. R. Charles Silvester Joe (Member)
8. Rev. Fr. J. John Wilson (Member)
9. Ms. V. Sivakamasundari (Member)
10. Ms. C. Josphine Arockiamary (Member)
11. Dr. P. Subuthai (Member)
12. Mr. S. Issac Britto (Member)

All the board members were present.

The Board of Studies meeting started with a prayer rendered by Rev Fr. J. John Wilson. The Chairman of the board, Dr. B. Kanickairaj welcomed and introduced the external experts Dr. S. Kalidass (University Representative), Dr. John Bosco Balaguru (Academic Expert), Mr. Sathyan kaliyamoorthy (Industrial Expert), Mr. R. Gowshik (Student Representative) and other board members. Prof. V. Sivakamasundari read out the minutes of the previous board meeting and it was passed. The Chairman of the board, Dr. B. Kanickairaj briefed all the UG papers and the board has discussed all the papers and gave consent as follows:

UG COURSE PATTERN

The Head of the Department, Dr. B. Kanickairaj presented the UG Course Pattern. Dr. S. Kalidass enquired how the credits were allotted. He further added that the credits for the major papers and practicals should have been increased (especially for the sensors and Instrumentation and Power Electronics papers) and credits for the Allied papers should have been decreased. Dr. B. Kanickairaj explained the credit system offered in the college premises. Dr. John Bosco Balaguru accepted all the views of Dr. S. Kalidass on credit system. He suggested to reduce the 5 credits into 4 and 7 credits into 6 in the first two semesters and allot the same to the above-mentioned papers to increase their credits. Dr. B. Kanickairaj replied that all these credit systems have been given by the college and he would convey all these suggestions to the Dean/Academics. With all these fruitful discussions, the UG Course Pattern was passed by the board.

SEMESTER I

SEMICONDUCTOR THEORY AND ELECTRONIC DEVICES

Dr. John Bosco Balaguru suggested that the unit II can be changed as unit V so that the active components would be discussed in first four units and passive components would be discussed in the last unit. But Dr. S. Kalidass felt that the flow of the paper was well formed which would be beneficial to the first-year students to follow the subject easily and his opinion was accepted by all the board members and then the paper was passed.

[Signature]
HRD

SEMESTER II

ELECTRIC CIRCUIT ANALYSIS

Dr. John Bosco Balaguru appreciated the formation of the syllabus and Dr. S. Kalidass also accepted that and then the paper was passed by the board.

ELECTRONICS PRACTICAL - I

Dr. John Bosco Balaguru suggested that ~~the~~ some of the experiments can be paired so as to accomplish them on allotted timing. The board accepted and passed the paper.

WORKSHOP PRACTICE - I

Dr. S. Kalidass admired that the proposed workshop practice experiments would enhance the practical skills of the student fraternity and that would be beneficial to them in future industrial career. Dr. John Bosco Balaguru enquired about the toolkit supplied to the students for the workshop. Dr. B. Kanickairaj answered him that the students usually purchase the tool kit components by their own. With these views, the paper was passed.

SEMESTER III

DIGITAL ELECTRONICS

Dr. John Bosco Balaguru recommended to add Verilog HDL as unit V. Mr. Sathyan kaliyamoorthy asked whether it would be opt for Digital Electronics or not. Dr. John Bosco Balaguru explained him the need of digital design in industry and the associated placement opportunities. Mr. Sathyan kaliyamoorthy accepted his views and finally the paper was passed by the board.

ELECTRONIC CIRCUITS

After the verification of non -repetition in any unit, the paper was passed by the board with good comments.

SOUND ENGINEERING

Dr. S. Kalidass put a word that the paper was the interesting portion in the entire curriculum that pupil can enjoy technically. Dr. John Bosco Balaguru also accepted that it was like Value Added Course and thus the paper has been passed.

LAB EQUIPMENT MAINTENANCE AND SERVICING

The paper was passed with no comments

SEMESTER IV

LINEAR INTEGRATED CIRCUITS

The paper was passed by the board with no comments

COMMUNICATION ELECTRONICS

Dr. John Bosco Balaguru insisted to add some Digital communication concepts and the paper was passed

ELECTRONICS PRACTICAL - II

The paper was passed by the board with no comments

PC ASSEMBLING AND SERVICING

Dr. S. Kalidass enquired about the department of the students of this paper. The Head of the Department, Dr. B. Kanickairaj replied that the paper was for other department students. With no further comments, the paper was passed by the board.


HOD

SEMESTER V

MICROPROCESSORS AND APPLICATIONS

Dr. S. Kalidass felt that the formation of syllabus was heavy for the UG level. He also continued that anyway that will be fruitful to the question paper setter for asking questions in different dimensions. Dr. John Bosco Balaguru suggested to allot that paper to an experienced faculty to plan and complete the syllabus smoothly. Finally, the paper was passed.

SENSORS AND ELECTRONIC INSTRUMENTATION

Dr. S. Kalidass and Dr. John Bosco Balaguru conveyed their opinion on increasing the credit allotted to the paper and the paper was passed by the board without any further modifications.

ELECTRONICS PRACTICAL - III

The paper was passed by the board with no comments

MOBILE COMMUNICATION

Discussion went on to change the name of the paper and finally decided by the board to keep the same title and so the paper was passed without any comments

MEDICAL ELECTRONICS

The paper was passed by the board without any comments

C AND PYTHON PROGRAMMING

The student representative Mr. R. Gowshik said that C and Python can be given as separate papers. Dr. B. Kanickairaj replied him that all the needed topics for both languages were covered carefully in the syllabus. Rev. Fr. John Wilson suggested that the Value-Added Courses on the same subject can be conducted in the UG first year itself. The board accepted and the paper was passed.

COMPUTER HARDWARE AND NETWORKS

The Head of the Department, Dr. B. Kanickairaj explained that the paper was for our (internal) students and it was passed by the board without any comments

RF, MICROWAVE AND OPTO ELECTRONICS

Dr. John Bosco Balaguru suggested to change the title of the paper like: RF, Microwave and Optical Communication and the paper was passed without any further comments.

PCB DESIGN AND FABRICATION

The Head of the Department, Dr. B. Kanickairaj expressed the guidelines followed by the department for the self-paced courses. The paper was passed.

EVERYDAY ELECTRONICS

The paper was passed by the board without any modifications

WIRELESS COMMUNICATION

The Head of the Department, Dr. B. Kanickairaj informed the board that the paper can be selected by any Arts and Science student in the college and so the syllabus was formulated with basic concepts clearly. The board accepted and the paper was passed.

SEMESTER VI

MICROCONTROLLERS AND EMBEDDED SYSTEM

Dr. S. Kalidass felt that the paper was heavy for UG level. Dr. John Bosco Balaguru appreciated the syllabus. He said that some of the topics might have been rearranged. He further insisted that the paper should have been handled as complete practical paper. The board accepted all his points and the paper was passed

POWER ELECTRONICS

M. S. S.
HOD

The paper was passed by the board without any comments

ELECTRONICS PRACTICAL - IV

The paper was passed by the board without any comments

CONTROL SYSTEM

Dr. S. Kalidass expressed his thought as the paper must be a regular and needed paper. With this point, the paper was passed by the board

VIRTUAL INSTRUMENTATION

The paper was passed by the board without any comments

ROBOTICS AND INDUSTRIAL AUTOMATION

The student representative Mr. R. Gowshik requested to add PLC in the paper. Dr. John Bosco Balaguru accepted his views and he insisted to add PLC in practical also. He further added that completion of the syllabus on time must have been ensured for this paper. The paper was then passed.

DIGITAL IMAGE PROCESSING

Dr. John Bosco Balaguru commented that it was a standard and well – organized paper. He requested the faculty member who would handle the paper, should take the basics of signals also.

Then the paper was passed

CONSUMER ELECTRONICS

Dr. S. Kalidass insisted that some of the electrical gadgets like AC should have been removed and instead of that some Electronic gadgets like mobile phone/CCTV can be added. The board accepted all his views and so the paper has been passed.

INDUSTRIAL ELECTRONICS

The paper was passed by the board without any comments

CCTV AND SMART SECURITY SYSTEMS

Dr. S. Kalidass and Dr. John Bosco Balaguru jointly appreciated the formation of the paper. They suggested that the paper can be added as one of the core papers for our students. The paper was passed without any further clarifications

ENTREPRENEURIAL ELECTRONICS

The paper was passed by the board without any comments

The Head of the Department, Dr. B. Kanickairaj requested the external experts to consolidate their final views. Dr. S. Kalidass concluded that all the major papers should have been given with equal credits. Dr. John Bosco Balaguru consolidated that the Microprocessor and Microcontroller papers must have been handled as practical oriented papers. He felt that the Control System paper can be added with a text book authored by Johnson which would help to reduce the syllabus furtherly. He added that video lectures (authored by IIT professors) can be shown for certain papers.

Mr. Sathyan kaliyamoorthy concluded that PLC, Machine Learning and Artificial Intelligence can be added. He insisted to add Python and Embedded C experiments in laboratory sessions. Mr. R. Gowshik concluded that the syllabus was heavy for UG standard. He requested to add some of the communication protocols like SPI, UART and CAN in Microprocessor/Controller paper.

The external experts Dr. S. Kalidass (University Representative), Dr. John Bosco Balaguru (Academic Expert), Mr. Sathyan kaliyamoorthy (Industrial Expert) Mr. R. Gowshik (Student Representative) strongly recommended to revoke M.Sc Electronics which have been leaving a pave way to the candidates for the past twenty six years to be placed in top


HOD

industries and accommodated themselves as successful entrepreneurs. They further left a note that M.Sc Electronics is being treated as Engineering degree and so helpful to the students to grab better jobs in industries. UG degree will not be sufficient for the students to get opportunities in Industries. The panel thus strongly recommended again to revoke M.Sc Electronics in order to light many lives.

✓ The board accepted all the suggestions carried out for the syllabus UG 2021. All the suggestions given by the panel members were noted and will be implemented. Finally, the Head of the department Dr. B. Kanickairaj proposed the vote of thanks to all the panel and the board members.

✓ Since the board accepted all the suggestions and hence implemented.

Dr. S. Kalidass
University Representative

Dr. B. Kanickairaj
Chairman

Dr. John Bosco Balaguru
Subject Expert

Mr. Sathyan kaliyamoorthy (Industrial Expert)

Mr. R. Gowshik (Student Representative)

Mr. A. Arputharaj (Member)

Mr. R. Charles Silvester Joe (Member)

Rev. Fr. J. John Wilson (Member)

Ms. V. Sivakamasundari (Member)

Ms. C. JosphineArockiamary (Member)

Dr. P. Subuthai (Member)

Mr. S. Issac Britto (Member)


HOD


Dr. A.N. PAUL ANGELO
DEAN-School of Physical Sciences
St. Joseph's College (Autonomous)
Tiruchirappalli-620 002.