

Appendix - II (L)

**Regulations for the Master of Science (MS) in
NEW GENERATION OF ELECTRONIC COMPONENT BASE
offered by Cochin University of Science and Technology
in collaboration with
Saint Petersburg Electrotechnical University “LETI”, Russia
and coordinated by
Division of Electronics Engineering, School of Engineering,
CUSAT**

SCOPE:

The following regulations are made applicable to the Master of Science (MS) in NEW GENERATION OF ELECTRONIC COMPONENT BASE offered by Cochin University of Science and Technology in collaboration with Saint Petersburg Electrotechnical University “LETI”, Russia and coordinated by Division of Electronics Engineering, School of Engineering, CUSAT with effect from the academic year 2024-2025. This programme aims to enhance the exchange of students between CUSAT and ETU LETI by providing students with valuable educational opportunities to obtain degrees from both universities.

The programme is an opportunity for CUSAT to set a benchmark on quality of Master programme at an international level. The programme focuses on microelectronics and semiconductor technology which is highly relevant to our country. Indian government has implemented ‘India Semiconductor Mission (ISM)’ as a specialized and independent Business Division within the Digital India Corporation that aims to build a vibrant semiconductor and display ecosystem to enable India’s emergence as a global hub for electronics manufacturing and design. This initiative by the Indian government is attracting semiconductor industries to our country demanding graduates specialised in microelectronics and semiconductor technologies.

DEFINITION:

Dual degree programme shall be a programme jointly designed and offered by CUSAT and Indian/foreign Higher Educational Institutions in the same disciplines/subject areas and in the same level. The degrees for such programme shall be conferred by CUSAT and India/foreign Higher

educational institutions, separately and simultaneously, upon completion of degree requirements of both the institutions. This shall not in any way be construed as two-degree programmes in separate disciplines/subject areas and/or levels being pursued simultaneously.

1. Dual Degree Masters Programme

The Master of Science (MS) in NEW GENERATION OF ELECTRONIC COMPONENT BASE offered by the CUSAT and ETU LETI shall be of four semesters duration spanning over a period of two academic years; wherein the first three semesters will include Lectures, Lab work, Practice, Research Coursework, Unsupervised Work, Interdisciplinary project and Internship (Research Project & pre-masters internship). The student will devote the fourth semester on a project (Graduate Qualifying Work) related to a relevant area of the specialization either in the Department / School or in an industrial / research / academic institution outside the University.

The programme allows students from each Institution to complete a part of their studies abroad, thereby enhancing their academic career within an international context, improving their command of a foreign language, and gaining valuable experience from both a personal and professional perspective.

Students enrolled in the Dual Degree Masters Programme will enrol and study at both institutions according to the curriculum and mobility plan. Each student admitted shall be assigned a Unique Registration Number by the department concerned in a format prescribed by the university, which will be valid throughout his/her programme of study in the University. Students enrolled at both institutions will complete first & second semesters at home university and third & fourth semesters at host university. Upon successful fulfilment of the program and all degree requirements at each institution, the students from LETI and CUSAT will be granted academic degrees from both institutions.

Subject to a mutual evaluation of the partner institution's standards for accreditation by both Parties, some of the credits earned from CUSAT / LETI will be accepted as equivalent to those attained through agreed/selected courses offered by CUSAT / LETI.

1.1 Branches of Study / Specialization

Sl. No.	Branch of study /specialization	Department / Division / School co-ordinating the programme	Full time / Part time
1.	Master of Science (MS) in NEW GENERATION OF ELECTRONIC COMPONENT BASE	Division of Electronics Engineering, School of Engineering & Saint Petersburg Electrotechnical University "LETI", Russia	Full time

A student is admitted to the course as per the eligibility criteria prescribed below:

1.2. Eligibility for admission

1.2.1 The specific eligibility criteria for the Master of Science (MS) in NEW GENERATION OF ELECTRONIC COMPONENT BASE are given below.

i) Shall have passed B.Tech/ BE/ AMIE/ AMIETE Degrees in Electronics & Communication / Electrical and Electronics / Electronics and Instrumentation / Applied Electronics and Instrumentation branch or M.Sc in Physics/ Photonics / Electronics from any University in Kerala or an Examination of any other University/Institution accepted by this University as equivalent thereto with a minimum of 70% marks or 7.5 CGPA on a scale of 10. Preference will be given to GATE qualified candidates and in the absence of adequate number of GATE qualified candidates, selection will be based on the Departmental Admission Test conducted jointly by the involved departments in CUSAT.

ii) Both institutions guarantee that their candidates selected for Dual Degree Masters Programme will be deemed to be of an appropriate calibre and will possess appropriate academic and linguistic qualifications. To be admitted to the Dual Degree Masters Programme, students must meet all relevant admission policies at both institutions.

1.2.2 Sponsored Candidates must have a minimum experience of three years in the relevant field and must be sponsored by University or Industry/Teaching/Research Organizations of Centre/State Government/or by Private Engineering Colleges approved by AICTE. Also, a special fee equivalent to the contingent grant received for GATE qualified candidates will be levied on the sponsored candidates.

1.2.3 The maximum number of students for the Dual Degree Masters Programme to be exchanged under the fee waiver scheme is 5 per year for each institution. Eligibility for fee waiver scheme will be based on their academic performance.

Students enrolled in Dual Degree Masters Programme will be enrolled at both institutions, and will be entitled to the facilities and services offered by both institutions. They will begin graduate study at each institution in the same term. Students will be subjected to all relevant regulations, codes of practice and procedures at both institutions, and will confirm their agreement to abide by those terms upon registration at each institution.

1.3 Course Structure

1.3.1 The course content of Dual Degree Masters Programme shall consist of Lectures, Lab work, Practice, Research Coursework, Unsupervised Work, Interdisciplinary project, Internship (Research Project & pre-masters internship) and project (Graduate Qualifying Work).

1.3.2 The curriculum for the first three semesters shall generally consist of Lecture, Lab work, Practice, Research Coursework, Unsupervised Work, Interdisciplinary project and Internship (Research Project).

1.3.3 The minimum number of credits to be earned by a student for the award of the Dual Degree Masters Programme shall be 120 subject to the condition that the candidate successfully completes all the core and elective courses prescribed by the Department / School.

1.3.4 Students enrolled in a Dual Degree Masters Programme are expected to complete all required coursework, research project, research report, dissertation and any other work necessary subject to the rules and regulation set by both CUSAT and LETI to satisfy the requirements of his or her master's program at both Universities.

1.3.5 Students who complete the requirements will be awarded degrees separately and simultaneously by both universities, in accordance with the relevant regulations in force in each country and based on the conditions established by the two Parties for students of the Dual Degree Masters Programme.

1.3.6 English will serve as the medium of instruction for teaching in both institutions.

1.3.7 In the case of online courses attended by the student, a certificate of satisfactory completion and marks/ grade if any issued by the authority who conducted the course must be submitted to the Head of the Department. The Department can conduct a viva on the subject of the online course if necessary. On the completion of this, the department council can award the respective weightage/grade to the student as per CUSAT regulations.

1.3.8 A concise academic schedule is outlined below for the Dual Degree Masters Programme.

Semester	Timeline
I	July to December (At CUSAT)
II	January to April (At CUSAT)
III	July to December (At LETI)
IV	January to June (At LETI)

1.4 Mode of Evaluation

1.4.1 A student would be considered to have progressed satisfactorily at the end of a semester if he/she has a minimum of 75 % attendance. The evaluation is completely internal.

1.4.2 Supervisory Committee-

A supervisory committee, composed of the Head of the host department (Chairman of the committee), a faculty coordinator from ETU LETI (Convener of the committee), the Director of International Relations, and one coordinator each from Division of Electronics Engineering, SOE, the Department of Electronics (DOE), and the Department of Physics and Department of Instrumentation, will be established to assess and oversee the students' progress throughout their term at both institutions. The committee must ensure that all academic and qualifying criteria from both institutions have been satisfied so that degrees can be separately and simultaneously be granted.

1.4.3 The student shall be evaluated continuously throughout the semester and marks shall be awarded on the basis of tests / assignments as detailed below:

A maximum of 20 marks are awarded for the various assignments/lab work/practices given to the students by the concerned faculty.

There shall be two class tests and an end semester examination.

The first class test carries 20 marks and will be based on the portions of the syllabi covered till then.

The second class test also carries 20 marks and will be based on the portions covered till then after the first class test.

The end semester examination will be for 40 marks and shall contain questions from the entire syllabi of the course.

The duration of the end semester examination shall be of three hours.

1.4.4 The results of each course in a semester shall be finalized by the concerned faculty member within 10 days from the last date of the end semester examination and the marks and grades obtained by the candidate in each subject shall be displayed on the notice board with the approval of the course-coordinator and head of the division/ department / school concerned.

1.4.5 The pass minimum in a course is 50%, with a separate minimum of 45% for end semester examination. If a candidate fails to secure 50% marks, he/she shall be deemed to have failed in the course.

1.4.6 Those who fail in any course shall approach the teacher concerned, if necessary, for a re-examination of the semester end examination. Within ten days of the display of the results in the notice board, the department shall conduct an additional semester end examination for these candidates. This re-examination is only to provide the student a chance to pass the examination by completing the course successfully. If he/she completes the course successfully making use of this additional chance, he/she will be awarded only a 'D' grade enabling the candidate to be declared successful in that course. If he/she cannot make it up, he/she may repeat the semester end examination of that course along with the subsequent batches, or re-register and repeat the course. In this case he/she will be awarded whatever grade he/she has secured.

1.4.7 A pass in the course will entitle the student to acquire the number of credits allotted for that particular course. (For the details of number of credits, please refer to the course structure.)

1.4.8 A student shall acquire a minimum of 60 credits in the first two semesters before he/she can continue the programme at LETI for third and fourth semesters. A student shall complete the Dual Degree Masters Programme in 8 (eight) consecutive semesters in the case of full-time programme by acquiring the minimum total credit requirement of 120.

1.4.9 Project evaluation shall be done at the end of III and IV semesters. The evaluation at the end of III Semester shall be conducted by an examination committee consisting of the head of the department / school / division, a senior teacher nominated by the head and the project guide.

At the end of Semester IV, the students will have to submit a dissertation on his / her project (Graduate Qualifying Work). The dissertation shall have to be submitted as per the guidelines given in Appendix I.

Three bound copies along with a soft copy of the dissertation shall be submitted to the Head of the Department/School within the last date prescribed by the Department / School for the purpose.

1.4.10 The dissertation will be evaluated by an examination committee consisting of the head of the department / school / division, another senior teacher of the department/school /division concerned nominated by the Head of the Department / School, and the project guide. However, an external examiner may also be included in the examination committee with the approval of the Department / School Council. The candidate shall make an open defence of his/her dissertation which will be followed by a viva-voce examination.

Completion of the dissertation requires a defense at both institutions, with an in-person defense at the home university and an online defense at the host university, in order to qualify for the dual degree.

1.4.11 For the purpose of assessment, the performance of a student in the project dissertation may be divided into the following sub components:

At the end of III semester

Assessment by the project guide (based on periodic assessment of the work of the candidate) - 50%

Assessment by the examination committee - 50%

At the end of IV semester

Assessment by the project guide (based on periodic assessment of the work of the candidate) - 50%

Assessment by the examination committee - 50%

1.5 Classification

The following grading system is adopted for all the courses. The following grades will be awarded based on the overall performance in each course.

<u>Range of Marks</u>	<u>Grades</u>	<u>Weightage</u>
90 % and above	S- Outstanding	10
(80-89)	A- Excellent	9
(70-79)	B- Very Good	8
(60-69)	C- Good	7
(50-59)	D- Satisfactory	6
Below 50%	F- Failed	0

Overall performance at the end of the semester will be indicated by Grade Point Average (GPA) calculated as follows:

$$\text{GPA} = \frac{G_1C_1 + G_2C_2 + G_3C_3 + \dots + G_nC_n}{C_1 + C_2 + C_3 + \dots + C_n}$$

where 'G' refers to the grade weightage and 'C' refers to the credit value of corresponding course undergone by the student.

At the end of the final semester, Cumulative Grade Point Average (CGPA) will be calculated based on the above formula.

Classification for the Degree will be as follows:

<u>Classification</u>	<u>CGPA</u>
First class with distinction	8 and above
First class	7 and above
Second class	6 and above

2. Declaration of Results

An examination committee consisting of the Head of the Department (Chairperson), a senior teacher/Head of the Division concerned and the Course Coordinator shall scrutinise the marks and grades obtained by the candidates and finalise the results. The examination committee will be constituted by the Head of the department/school.

The grades and credits achieved in the third and fourth semesters at LETI will be communicated to CUSAT through credit transfer. This information will then be tabulated alongside the results of the first and second semesters conducted at CUSAT. The final marks will be reported to the University for

tabulation and declaration of results. The University shall issue mark lists at the end of each semester.

2.1 Review of Question Papers and Valuation of answer books

At the end of each semester, the question papers set for class tests and end semester examinations will be reviewed by the Department / School Council of the host/home university. The review report may be placed in the Board of Studies concerned for scrutiny.

2.2 Grievance Cell

The Departmental / School Council or a subcommittee nominated by the Council will act as the grievance cell for the redress of complaints from the students on the conduct of the class test, semester exam, and the valuation methodology. The student shall make such complaints to the Head of the Department / School within a week of the display of the marks/grades for a particular course on the Notice board of the Department / Division.

3 Leave for a Dual Degree Masters Programme student with fee waiver/assistance

3.1 A full time student shall be entitled to the following kinds of leave during every academic year, counted from the date of commencement of the session concerned as prescribed in the academic calendar of the institute.

3.2 Any absence over and above the prescribed type of admissible leave shall entail deduction from the scholarship, beside other action as may be decided by the University.

Sl.No.	Leave	Maximum number of days	Sanctioning authority
1.	Casual Leave	5 days per semester subject to the condition that such leave will not be allowed for more than 3 days at a time. Casual leave cannot be combined with medical leave.	Head of the Department / School
2.	Medical Leave	3 days per semester	Head of the Department / School on the basis of a Medical Certificate from a registered Medical Practitioner certified by the University Medical Officer.

4 Revision of Regulation and Curriculum

The University may from time to time, revise, amend or change the regulations, schemes of examinations and syllabus. In the case of students already undergoing the course, the change will take effect from the beginning of the following academic year after the changes are introduced and shall cover the part of the course that remains to be completed.

APPENDIX-I

GUIDELINES FOR PREPARATION OF DISSERTATION

Preamble

While utmost attention must be paid to the content of the dissertation report, which is being submitted in partial fulfilment of the requirements of the Dual Degree Masters Programme, it is imperative that a standard format be prescribed. The same format shall also be followed in preparation of the final soft copies to be submitted to the Library in future.

1. Organisation of the Dissertation

The dissertation report shall be presented in a number of chapters, starting with Introduction and ending with Summary and Conclusions. Each of the other chapters will have a precise title reflecting the contents of the chapter. A chapter can be subdivided into sections, subsections and sub-subsection so as to present the content discretely and with due emphasis. When the work comprises two or more mutually independent investigations, the dissertation report may be divided into two or more parts, each with an appropriate title. However, the numbering of chapters will be continuous right through, for example Part 1 may comprise Chapters 2 - 5, Part 2, Chapters 6 - 9.

1.1 Introduction

The title of Chapter 1 shall be Introduction. It shall justify and highlight the problem posed, define the topic and explain the aim and scope of the work presented in the dissertation report. It may also highlight the significant contributions from the investigation.

1.2 Review of Literature

This shall normally form Chapter 2 and shall present a critical appraisal of the previous work published in the literature pertaining to the topic of the investigation. The extent and emphasis of the chapter shall depend on the nature of the investigation.

1.3 Report on the present investigation

The reporting on the investigation shall be presented in one or more chapters with appropriate chapter titles. Due importance shall be given to experimental setups, procedures adopted, techniques developed, methodologies developed and adopted. While important derivations/formulae should normally be presented in the text of these chapters, extensive and long treatments, copious details and tedious information, detailed results in tabular and graphical forms may be presented in Appendices. Representative data in table and figures may, however, be included in appropriate chapters. Figures and tables should be presented

immediately following their first mention in the text. Short tables and figures (say, less than half the writing area of the page) should be presented within the text, while large table and figures may be presented on separate pages. Equations should form separate lines with appropriate paragraph separation above and below the equation line, with equation numbers flushed to the right.

1.4 Results and Discussion

his shall form the penultimate chapter of the dissertation report and shall include a thorough evaluation of the investigation carried out and bring out the contributions from the study. The discussion shall logically lead to inferences and conclusions as well as scope for possible further future work.

1.5 Summary and Conclusions

This will be the final chapter of the dissertation report. A brief report of the work carried out shall form the first part of the Chapter. Conclusions derived from the logical analysis presented in the Results and Discussions Chapter shall be presented and clearly enumerated, each point stated separately. Scope for future work should be stated lucidly in the last part of the chapter.

1.6 Appendix

Detailed information, lengthy derivations, raw experimental observations etc. are to be presented in separate appendices, which shall be numbered in Roman Capitals (e.g. “Appendix IV”). Since reference can be drawn to published/unpublished literature in the appendices these should precede the “Literature Cited” section.

1.7 Literature Cited

This should follow the Appendices, if any, otherwise the Summary and Conclusions chapter. The candidates shall follow the style of citation and style of listing in one of the standard journals in the subject area consistently throughout his/her report. However, the names of all the authors along with their initials and the full title of the article/monogram/book etc. have to be given in addition to the journals/publishers, volume, number, pages(s) and year of publication. Citation from websites should include the names(s) of author(s) (including the initials), full title of the article, website reference and when last accessed. Reference to personal communications, similarly, shall include the author, title of the communication (if any) and date of receipt.

1.8 Publications by the candidate

Articles, technical notes etc. on the topic of the dissertation report published by the candidate may be separately listed after the literature cited. This may

also be included in the contents. The candidates may also include reprints of his/her publications after the literature citation.

1.9 Acknowledgements

The acknowledgments by the candidate shall follow the citation of literature, signed by him/her, with date.

2. DISSERTATION FORMAT

2.1 Paper

2.1.1 Quality: The dissertation report shall be printed / photo copied on white bond paper, whiteness 95% or above, weight 70 gram or more per square meter.

2.1.2 Size: The size of the paper shall be standard A4; height 297 mm, width 210 mm.

2.1.3 Type Setting, Text Processing and Printing: The text shall be printed employing Laserjet or Inkjet printer, the text having been processed using a standard text processor. The standard font shall be Times New Roman of 12 pts with 1.5 line spacing.

2.1.4 Page Format: The Printed Sheets shall have the following written area and margins:

Top Margin 15 mm

Head Height 3 mm

Head Separation 12 mm

Bottom Margin 22 mm

Footer 3 mm

Foot Separation 10 mm

Text Height 245 mm

Text Width 160 mm

When header is not used the top margin shall be 30 mm.

Left and Right Margins

Single sided

Left Margin 30mm

Right Margin 20 mm

2.1.5 Pagination: Page numbering in the text of the report shall be Hindu Arabic numerals at the centre of the footer. But when the candidate opts for header style the page number shall appear at the right and left top corner for the odd and even number pages, respectively. Page number “1” for the first page of the Introduction chapter shall not appear in print, only the second page will bear the number “2”. The subsequent chapters shall begin on a fresh page. When header style is chosen the first page of each chapter will not have the header and the page number shall be printed at the centre of the footer. Pagination for pages before the Introduction chapter shall be in lower case Roman numerals, e.g., “iv”.

2.1.6 Header: When the header style is chosen, the header can have the Chapter number and Section number (e.g., Chapter 2, Section 3) on even numbered page headers and Chapter title or Section title on the odd numbered page header.

2.1.7 Paragraph format: Vertical space between paragraphs shall be about 2.5 line spacing. The first line of each paragraph should normally be indented by five characters or 12mm. A candidate may, however, choose not to indent if he/she has provided sufficient paragraph separation. A paragraph should normally comprise more than one line. A single line of a paragraph shall not be left at the top or bottom of a page (that is, no windows or orphans should be left). The word at the right end of the first line of a page or paragraph should, as far as possible, not be hyphenated.

2.2 Chapter and Section Format

2.2.1 Chapter: Each chapter shall begin on a fresh page with an additional top margin of about 75mm. Chapter number (in Hindu-Arabic) and title shall be printed at the centre of the line in 6mm font size (18pt) in bold face using both upper and lower case (all capitals or small capitals shall not be used). A vertical gap of about 25mm shall be left between the Chapter number and Chapter title lines and between chapter title line and the first paragraph.

2.2.2 Sections and Subsections: A chapter can be divided into Sections, Subsections and Sub-sub Sections so as to present different concepts separately. Sections and subsections can be numbered using decimal points, e.g. 2.2 for the second section in Chapter 2 and 2.3.4 for the fourth Subsection in third Section of Chapter 2. Chapters, Sections and Subsections shall be included in the contents with page numbers flushed to the right. Further subsections need not be numbered or included in the contents. The Section and Sub-Section titles along with their numbers in 5 and 4mm (16 and 14 pt) fonts, respectively, in bold face shall be flushed to the left (not centred) with 15 mm space above and below these lines. In further subdivisions character size of 3 and 3.5 with bold face, small caps, all caps and italics may be used for the titles flushed left or centred. These shall not feature in the contents.

2.2.3 Table / Figure Format: As far as possible, tables and figures should be presented in portrait style. Small size table and figures (less than half of writing area of a page) should be incorporated within the text, while larger ones may be presented on separate pages. Table and figures shall be numbered chapter wise.

For example, the fourth figure in chapter 5 will bear the number Figure 5.4 or Fig 5.4 Table number and title will be placed above the table while the figure number and caption will be located below the figure. Reference for Table and Figures reproduced from elsewhere shall be cited in the last and separate line in the table and figure caption, e.g. (after McGregor[12]).

3 Auxiliary Format

3.1 Binding: The evaluation copies of the dissertation report may be spiral bound or soft bound. The final hard bound copies to be submitted after the viva-voce examination will be accepted during the submission of dissertation report with the following colour specification:

Dual Degree Masters Programme Dissertation

3.2 Front Covers: The front covers shall contain the following details:

Full title of report in 6 mm 22 point's size font properly centred and positioned at the top. Full name of the candidate in 4.5 mm 15 point's size font properly centred at the middle of the page. A 40 mm dia replica of the Institute emblem followed by the name of department, name of the Institute and the year of submission, each in a separate line and properly centred and located at the bottom of page.

3.2.1 Lettering: All lettering shall be embossed in gold.

3.2.2 Bound back: The degree, the name of the candidate and the year of submission shall also be embossed on the bound (side) in gold.

3.3 Blank Sheets: In addition to the white sheets (binding requirement) two white sheets shall be put at the beginning and the end of the report.

3.4 Title Sheet: This shall be the first printed page of the Dissertation and shall contain the submission statement: The Dissertation Report submitted in partial fulfilment of the requirements of the Master of Science (MS) in NEW GENERATION OF ELECTRONIC COMPONENT BASE, the name and Roll No. of the candidate, name(s) of the Supervisor and Co-supervisor(s) (if any), Department, Institute and year of submission.

Sample copy of the 'Title Sheet' is appended (Specimen 'A').

3.5 Dedication Sheet: If the candidate so desires(s), he/she may dedicate his/her report, which statement shall follow the title page. If included, this shall form the page 1 of the auxiliary sheets but shall not have a page number.

3.6 Approval Sheet: In the absence of a dedication sheet this will form the first page and in that case shall not have a page number. Otherwise, this will bear the number two in Roman lower case "ii" at the centre of the footer. The top line shall be: Dissertation Approval for Master of Science (MS) in NEW GENERATION OF ELECTRONIC COMPONENT BASE

A sample copy of the Approval Sheet is appended (Specimen `B')

3.7 Abstract: The 500 word abstract shall highlight the important features of the dissertation report and shall correspond to the electronic version to be submitted to the Library for inclusion in the website. The Abstract in the report, however, shall have two more parts, namely, the layout of the report giving a brief chapter wise description of the work and the key words.

3.8 Contents: The contents shall follow the Abstract and shall enlist the titles of the chapters, section and subsection using decimal notation, as in the text, with corresponding page number against them, flushed to the right.

3.8.1 List of Figures and Tables: Two separate lists of Figure captions and Table titles along with their numbers and corresponding page numbers against them shall follow the Contents.

3.9 Abbreviation Notation and Nomenclature: A complete and comprehensive list of all abbreviations, notations and nomenclature including Greek alphabets with subscripts and superscripts shall be provided after the list of tables and figures. As far as possible, generally accepted symbols and notation should be used.

Auxiliary page from dedication (if any) to abbreviations shall be numbered using Roman numerals in lower case, while the text starting from the Introduction shall be in Hindu Arabic.

The first pages in the both the cases shall not bear a page number.

3.10 A Declaration of Academic Honesty and Integrity: A declaration of Academic honesty and integrity is required to be included along with every dissertation report after the approval sheet. The format of this declaration is given in Specimen 'C' attached.

Specimen 'A': Title Sheet

(Title)

Dissertation Submitted in partial fulfilment of the requirements
of the Master of Science(MS) in NEW GENERATION OF ELECTRONIC
COMPONENT BASE

by

(Name of the Student)

(Roll No._____)

Project Guide(s):

(Name of the Department / School / Division)

COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

(Month and Year)

Specimen `B': Approval Sheet

This dissertation entitled (Title) by (Author Name) is recommended for the award of the Master of Science(MS) in NEW GENERATION OF ELECTRONIC COMPONENT BASE.

Members of the Examination Committee (Name and Signature)

Date : _____

Place : _____

Specimen `C' – Declaration

I declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

(Signature)

(Name of the student)

(Roll No.)

Date: _____

Specimen `D' – Certificate

**DEPARTMENT / SCHOOL OF -----
COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY**

This is to certify that the dissertation work entitled “ -----
-----“ is a bonafide record of work carried out by Mr/Ms -----
----- (Roll No.), submitted to the Department / School of -----
-----, in partial fulfilment of the requirements for the award of Master
of Science (MS) in NEW GENERATION OF ELECTRONIC
COMPONENT BASE offered by Cochin University of Science and
Technology in collaboration with Saint Petersburg Electrotechnical
University “LETI”, Russia and coordinated by Division of Electronics
Engineering, School of Engineering, CUSAT during the academic year -----
-----.

Name and Signature of the Project Guide -----

Signature of Head of the Division / Department / School -----

Date: