



MES KEVEEYAM COLLEGE VALANCHERRY

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Aided by Govt. of Kerala and Affiliated to University of Calicut
Reaccredited with 'A' Grade by NAAC (Score 3.28)
ISO 9001:2015 certified institution

List of new courses introduced in MSc Physics Programme

Name of the New Courses Introduced in the Last 5 years	Programme Name	Programme Code	Course Code	Year of Introduction
Classical Mechanics	M Sc Physics	MESKV/72/PH	PHY1CO1	2014
Mathematical Physics I	M Sc Physics	MESKV/72/PH	PHY1CO2	2014
Electrodynamics and Plasma Physics	M Sc Physics	MESKV/72/PH	PHY1CO3	2014
Electronics	M Sc Physics	MESKV/72/PH	PHY1CO4	2014
General Physics Practical I	M Sc Physics	MESKV/72/PH	PHY1PO1	2014
Electronics Practicals I	M Sc Physics	MESKV/72/PH	PHY1PO2	2014
Quantum Mechanics I	M Sc Physics	MESKV/72/PH	PHY2CO5	2014
Mathematical Physics II	M Sc Physics	MESKV/72/PH	PHY2CO6	2014
Statistical Mechanics	M Sc Physics	MESKV/72/PH	PHY2CO7	2014
Computational Physics	M Sc Physics	MESKV/72/PH	PHY2CO8	2014
General Physics Practical II	M Sc Physics	MESKV/72/PH	PHY2PO3	2014
Electronics Practicals II	M Sc Physics	MESKV/72/PH	PHY2PO4	2014
Quantum Mechanics II	M Sc Physics	MESKV/72/PH	PHY3CO9	2014
Nuclear and Particle Physics	M Sc Physics	MESKV/72/PH	PHY3CO10	2014
Solid State Physics	M Sc Physics	MESKV/72/PH	PHY3CO11	2014
Plasma Physics	M Sc Physics	MESKV/72/PH	PHY3EO1	2014
Project	M Sc Physics	MESKV/72/PH	PHY4Pr1	2014
Modern Physics Practical I	M Sc Physics	MESKV/72/PH	PHY3PO5	2014
Spectroscopy	M Sc Physics	MESKV/72/PH	PHY4CO12	2014
Lasers and Fibre Optics	M Sc Physics	MESKV/72/PH	PHY4E13	2014
Microprocessors and Applications	M Sc Physics	MESKV/72/PH	PHY4E20	2014
Modern Physics Practical II	M Sc Physics	MESKV/72/PH	PHY4PO6	2014
Computational Physics Practical	M Sc Physics	MESKV/72/PH	PHY4PO7	2014

PRINCIPAL

M.E.S. KEVEEYAM COLLEGE
VALANCHERRY, PIN- 676 552
MALAPPURAM





GOVERNMENT OF KERALA

Abstract

Higher Education – N.O.C for starting a Self-financing/Un-aided course of M.Sc Physics (12 seats) in M.E.S Keveeyam College, Valanchery (Aided) during the academic year 2014- 15- accorded - Orders issued.

HIGHER EDUCATION (B) DEPARTMENT

G.O. (Ms.) No: 815/2014/H.Edn

Dated, 26.09.2014, Thiruvananthapuram

Read:-1. G.O. (Rt.) No: 2220/2014/H.Edn Dated, 20.09.2014

2. Agreement dated 24.09.2014- executed by the Educational Agency.

ORDER

As per the Government order read as 1st paper above Administrative sanction was accorded for starting a Self-financing/Un-aided course of M.Sc Physics(12 seats) in M.E.S Keveeyam College, Valanchery(Aided) during the academic year 2014- 15 . The Management has executed an agreement with Government which is read as 2nd paper above.

In this circumstances Government are pleased to issue NOC for starting Self-financing/Un-aided course of M.Sc Physics(12 seats) in M.E.S Keveeyam College, Valanchery(Aided) during the academic year 2014-15 subject to the following conditions.

1. The Educational Agency shall submit the documents to prove that the College has adequate infrastructure, human and physical to conduct the course as required by the Government.
2. The Educational Agency shall abide by the procedure of admission in the college as decided by the Government from time to time.
3. The Educational Agency shall set apart 50% of the seats of the course for being filled up by the Government or such authority determined by Government on the basis of merit and reservation principles followed by the Government and the remaining 50% filled by the Educational Agency on the basis of merit.
4. The Educational Agency shall collect only such fees as determined by the Government from time to time from the students admitted to the college for the course.
5. The Educational Agency shall institute adequate number of scholarships on merit cum means basis as determined by the Government from time to time to the students admitted to the course.
6. The Educational Agency shall appoint and fix the service conditions of the teachers and non teaching staff in the college for conducting the course as followed by Government in conducting similar courses.
7. The Educational Agency shall institute an appropriate governance structure that would ensure transparency, efficiency and social accountability in the Educational agency as determined by the Government from time to time.
8. The Educational Agency shall publish the details regarding the establishment and governance of Educational agency, admission, fees, courses, results, teaching and other staff, and any further information as required by the Government on the website of the Educational agency.
9. The Educational Agency shall run only courses approved by the Government and the concerned University.

10. The Educational Agency shall enable the Government and its representatives to check, verify and monitor the compliance of the conditions mentioned above at any time the Government so decides.
11. The Educational Agency shall enter into an agreement with the affiliating University on the terms determined by the affiliating University in respect of all or any of the matters contained in this agreement.
12. In the event of breach of any of the conditions mentioned above by the educational agency, the Government is authorized to adjudicate the quantum of compensation which the Educational agency is liable to pay to the Government, if any, and, upon such adjudication, the Educational Agency shall pay to Government the amount so fixed, failing which the amount of compensation adjudicated should be recoverable under the provision of Kerala Revenue Recovery Act, 1968, as if they were public revenue due on land.
13. The No Objection Certificate granted shall be valid up to the end of the Academic year 2014-15 and renewable on the request of the Educational Agency and subject to the satisfactory compliance of the conditions specified herein.
14. The services of the teaching and non-teaching staff of the aided stream shall not be utilised for the proposed unaided courses.
15. There shall be no financial commitment to the Government.
16. In the event of the breach of any of the conditions mentioned above by the educational agency, the Government shall also be entitled to withdraw the sanction without formal notice to the Educational Agency.

(By order of the Governor)

Ajikumaran S

Special Secretary

To

1. The Registrar, University of Calicut
- ✓ 2. The Principal, M.E.S Keveeyam College, Valanchery, Malappuram
3. The Director of Collegiate Education, Thiruvananthapuram
4. Stock file/ Office copy.

Forwarded./ By Order

Section Officer



Copy to

The P.S. to Minister (Education).

The P.A to Additional Chief Secretary (Higher Education) Department.



UNIVERSITY OF CALICUT

Abstract

M.Sc Programme in Physics-Choice based Credit Semester System PG-Department of Physics of the University-Modified **Scheme and Syllabus 2012-approved**-implemented-w.e.f 2012 admissions-Orders issued.

UNIVERSITY OF CALICUT (G & A - IV - J)

U.O.No. 2070/2013/CU

Dated, Calicut University.P.O, 13.06.2013

*Read:-*1. U.O.No. GA/J2/2610/2007 dated 09.01.2009.

2.U.O.No. GA/J2/2610/2007 dated 09.02.2010

3.Item no.2 of the minutes of the meeting of the Board of Studies in Physics PG held on 21.01.2013

4.Orders of the Vice-Chancellor on 12.06.2013 in the file of even no.

ORDER

The Syllabus for MSc programme in Physics under Choice based Credit Semester System was implemented in the Department of Physics of the University, with effect from 2008 admissions, vide paper read as 1st above.

The Revised syllabus of MSc programme in Physics, prepared by the Departmental Council of the Department, under Choice based Credit Semester System was implemented in the Department of Physics of the University, with effect from 2009 admissions, vide paper read as 2nd above.

The Board of Studies in Physics PG, in its meeting held on 21.01.2013 resolved to approve the Modified Scheme and Syllabus for M.Sc programme in Physics, under Choice based Credit Semester System in the Department of Physics of the University, with effect from 2012 admissions.

The Vice-Chancellor, considering the exigency, exercising the powers of the Academic Council has approved the item to implement the Modified Scheme and Syllabus,w.e.f 2012 admissions.

Sanction has, therefore, been accorded for implementing the Modified Scheme and Syllabus of MSc programme in Physics under Choice based Credit Semester System in the Department of Physics of the University, with effect from 2012 admissions.

Orders are issued accordingly.

The Modified Scheme and Syllabus is available in the University website:www.universityofcalicut.info

Shanawaz T.P
Assistant Registrar

To

The Department of Physics.

Forwarded / By Order

Section Officer



UNIVERSITY OF CALICUT

Scheme and Syllabus for M.Sc. (Physics) Programme(CSS) for affiliated colleges w.e.f. 2012 admissions

The duration of the M.Sc (Physics) programme shall be 2 years, split into 4 semesters. Each course in a semester has 4 credits (4C) and Practicals having 2 credits (2C). The total credits for the entire programme is 80. The scheme and syllabus of the programme, consisting of sections (a) *Courses in various semesters* (b) *Constitution of clusters* (c) *The Credits and Hours* (d) *Grading and Evaluation* (e) *Detailed syllabus* (f) *Model question papers* are as follows:

A) COURSES IN VARIOUS SEMESTERS

Semester -I (16C)

(PHY1C01) Classical Mechanics (4C)
(PHY1C02) Mathematical Physics - I (4C)
(PHY1C03) Electrodynamics and Plasma Physics (4C)
(PHY1C04) Electronics (4C)
(PHY1P01) General Physics Practical -I
(PHY1P02) Electronics Practical -I

Semester -II (22C)

(PHY2C05) Quantum Mechanics -I (4C)
(PHY2C06) Mathematical Physics -II (4C)
(PHY2C07) Statistical Mechanics (4C)
(PHY2C08) Computational Physics (4C)
(PHY2P03) General Physics Practical -II (3C)
(PHY2P04) Electronics Practical -II (3C)

External Practical Exam. for PHY1P01 & PHY2P03, PHY1P02 & PHY2P04

Semester -III (16C)

(PHY3C09) Quantum Mechanics -II (4C)
(PHY3C10) Nuclear and Particle Physics (4C)
(PHY3C11) Solid State Physics (4C)
Elective -I (4C)
(PHY4Pr) Project
(PHY3P05) Modern Physics Practical -I

Semester -IV (26C)

(PHY4C12) Spectroscopy (4C)
Elective -II (4C)
Elective -III (4C)
(PHY4PrI) Project (4C)
(PHY4P06) Modern Physics Practical -II (3C)
(PHY4P07) Computational Physics Practical (3C)
Viva Voce (Comprehensive) (4C)

External Practical Exam. for PHY3P05 & PHY4P06, PHY4P07 and Comprehensive Viva Voce.

B) CONSTITUTION OF CLUSTERS

Elective -I Cluster:

(PHY3E01) Plasma Physics
(PHY3E02) Foundations of Quantum Mechanics
(PHY3E03) Radiation Physics
(PHY3E04) Computer Software and Applications
(PHY3E05) Fluid Dynamics
(PHY3E06) Digital Signal Processing
(PHY3E07) Experimental techniques

Elective -II Cluster:

(PHY4E08) Advanced Nuclear Physics
(PHY4E09) Astrophysics
(PHY4E10) Advanced Statistical Mechanics
(PHY4E11) Materials Science
(PHY4E12) Electronic Instrumentation
(PHY4E13) Lasers and Fibre Optics
(PHY4E14) Communication Electronics

Elective -III Cluster:

(PHY4E15) Quantum Field Theory
(PHY4E16) Chaos and Nonlinear Physics
(PHY4E17) Advanced Condensed Matter Physics
(PHY4E18) Modern Optics
(PHY4E19) Physics of Semiconductors
(PHY4E20) Microprocessors and Applications

C) THE CREDITS AND HOURS PER WEEK

The credits and hours proposed for various courses in different semesters are as given under.

Semester	No. of Theory Papers	Practicals	Theory		Practical		Project		Seminar	Viva Cred.	Total Hrs	Total Cred
			Hrs	Cred	Hrs	Cred	Hrs	Cred	Hrs			
I	4	1. Gen. Phy 2. Electronics	16	16	8	0	0	0	1	0	25	16
II	4	1. Gen. Phy 2. Electronics	16	16	8	6	0	0	1	0	25	22
III	4	1. Mod. Phy	16	16	4	0	4	0	1	0	25	16
IV	3	1. Mod. Phy. 2. Comp. Phy.	12	12	8	6	4	4	1	4	25	26
Total Credits for the Programme												80

D) GRADING AND EVALUATION

- (1) Accumulated minimum credit required for successful completion of the course shall be 80.
- (2) A project work of 4 credit is compulsory and it should be done in III & IV semesters. Also a comprehensive Viva Voce may be conducted by external examiners at the end of IV Semester and carries 4 credits.
- (3) Evaluation and Grading (as done in B.Sc CCSS):
All grading starting from the evaluation of papers is done on 5 point scale (A, B, C, D, E) and SGPA and