



www.swayam.gov.in

SWAYAM AN UNIQUE PLATFORM

**FOR
ONLINE
EDUCATION IN INDIA**



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi-110070
www.aicte-india.org www.swayam.gov.in
e-mail:- support@swayam.gov.in

DEVELOPMENT OF “SWAYAM” PLATFORM

BACKGROUND

SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds) Platform is indigenously developed by Ministry of Human Resource Development (MHRD) and All India Council for Technical Education (AICTE) with the help M/s. Microsoft Corporation India (Pvt.) Ltd. (MCIPL) for hosting Massive Open On-line courses (MOOCs) to achieve three cardinal principles of Education Policy viz., access, equity, and quality. The objective of this effort is to take the best teaching learning resources to all, including the most disadvantaged. SWAYAM seeks to bridge the digital divide for students who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy. SWAYAM would be ultimately capable of hosting 2000 courses and 80000 hours of learning: covering school, under-graduate, post-graduate, engineering, law and other professional courses.

SWAYAM is a One-stop web and mobile based interactive e-content for all courses from High School to University level; High quality learning experience using multimedia on anytime, anywhere basis; State of the art system that allows easy access, monitoring and certification; Peer Group interaction and discussion forum to clarify doubts and Hybrid model of delivery that adds to the quality of classroom teaching.

The Platform facilitates hosting of all the courses, taught in classrooms from 9th class till post-graduation to be accessed by anyone, anywhere at any time, prepared by the best teachers in the country, free of cost to the residents in India for learning any type of Course. The soft launch of “SWAYAM MOOCs” Platform was held on 15th August, 2016 and after completion of first phase of the Project, the Platform has been declared “go live” w.e.f. 16th November, 2016.

VISION

To host more than 10000 online Courses through SWAYAM platform for 30 million learners/students

starting from 9th class till post-graduation.

SWAYAM ANDROID MOBILE APP/GOOGLE PLAY/IOS

SWAYAM is available through Android Mobile app/Google Play/IOS which can be downloaded by anyone aspiring to pursue higher studies through MOOCs and get registered as learner or a Student for any course starting from 9th class till post-graduation.

SWAYAM TO BECOME GLOBAL

It is contemplated to make SWAYAM Platform for hosting MOOCs courses global for which the Platform Developers M/s. MCIPL have been advised to initiate necessary action for tackling the cyber threats and other complications, if any, subject to approval from MHRD/Government of India.

PROCESS ADOPTED FOR DEVELOPMENT OF “SWAYAM” PLATFORM

CREATION OF “SWAYAM PROJECT CELL” AT AICTE, NEW DELHI

“SWAYAM Project Cell” has been created at AICTE, Headquarters under the over-all control of Chairman, AICTE with Dr. M.S. Manna, Director, AICTE being the Officer-in-charge of SWAYAM Project Cell.

CONSTITUTION OF JOINT COMMITTEE OF SWAYAM PROJECT CELL

In terms of Office Memorandum No. 8-26/2014-TEL (Pt.), dated 21st March, 2016 issued by MHRD, Two Committees i.e. Management Committee and Technical Committee were constituted comprising National MOOCs Coordinators (NMCs) including the Additional Secretary, MHRD and the Chairman, AICTE for day to day monitoring, evaluation of technical proposals, procurement of software and review of the progress of implementation of the SWAYAM project. This Committee was later given the name of “Joint Committee” of SPC. The Committee has so far held 27 meetings for deliberating the various issues pertaining to development of “SWAYAM” Platform.



“COURSES” ON SWAYAM PLATFORM

As per MOOCs Guidelines, “Course” has been defined in two types: Credit Courses and Non-Credit Courses.

Credit Course is a course which is taught for at least one semester as a part of subject/programme while Non-Credit Course includes Courses like awareness programme, continuing education programme or training of specific skill set as independent course which are not part of any set curriculum and are of shorter duration.


As on date, there are a total of 408 courses uploaded on www.swayam.gov.in out of which the major Courses are – 258 Courses (Engineering); 42 Courses (Science); 38 Courses (Humanity) and 20 Courses (Management) and remaining 50 (Education, Library, General, Commerce, etc.). The soft launch of “SWAYAM MOOCs” Platform was held on 15th August 2016 and after completion of first phase of the Project, the Platform has been declared “go live” w.e.f. 16th November, 2016.

ISSUE OF GAZETTE NOTIFICATION REGARDING CREDIT TRANSFERS BY UNIVERSITIES/ INSTITUTIONS

AICTE has issued the Gazette Notification dated 22nd August 2016 for AICTE (Credit Framework for online learning courses through SWAYAM) Regulation 2016 advising the Universities/Institutions to identify courses where credits can be transferred on to the academic record of the students for courses done on SWAYAM. An Institution can only allow credit up to 20% of the total courses being offered in a programme

FIRST SEMESTER OF ONLINE COURSES TO START FROM JULY 2017 THROUGH “SWAYAM” PLATFORM

In accordance with the AICTE Credit Framework Regulation on SWAYAM MOOCs, all the Vice Chancellors/Registrars/Directors/Principals/Controllers of Examination have been forwarded a List of 168 AICTE MOOCs courses and 95 UGC MOOCs courses that would be offered through SWAYAM portal for the first semester starting in July 2017 with a request to consider the same as per the provisions of the Regulations immediately so that students can register for the same.



SALIENT FEATURES OF THE ‘SWAYAM’ PROJECT

FOUR QUADRANT APPROACH

“SWAYAM” MOOCs Platform initiated by Government of India and developed by All India Council for Technical Education (AICTE) has “four quadrant approach” with the following components:

- i) e-Tutorials containing Video and Audio Contents in an organized form, Animation, Simulations, Virtual Labs;
- ii) e-Contents, like, PDF/e-books/illustration, video demonstrations, documents and interactive simulations, wherever required;
- iii) Web Resources containing related links, open content on internet, case studies, anecdotal information, historical development of the subject, Articles;
- iv) Self-assessment containing MCQ, Problems Quizzes, Assignments and Solutions, Discussion forum topics and setting up the FAQ, Clarifications on general misconceptions.

NATIONAL COORDINATORS (NCs)

For development of the e-content, delivery of online courses and overseeing the assessment procedures of courses offered on SWAYAM, eight (8) National Coordinators have been identified by MHRD under the Revised MOOCs Guidelines. They are NPTEL for Technical/ Engineering UG & PG Degree Programmes; UGC for Non-Technology Post Graduate Degree Programmes; CEC for Non Technology UG Degree Programmes; NCERT for School Educational Programmes from Class 9th to 12th; IGNOU for Diplomas and Certificates Programmes; NIOS for out of School Children Educational Programmes from Class 9th to 12th ; IIM, Bangalore for Management Programmes and NTTR, Chennai for Teacher Training Programmes. AICTE has been allowed to create non-credit courses through British Council or any other Institute for which MHRD would issue necessary directions shortly.

STATUS OF COURSES, REGISTRATION OF PRINCIPAL INVESTIGATOR (PI) AND UPLOADING OF COURSES ON SWAYAM PLATFORM

About the present status of the courses uploaded on SWAYAM Portal, out of the total 408 courses uploaded on the SWAYAM Platform, there are 168 courses which are running/operational and 233 courses have ended/non-operational.

In order to become PI, a request is to be made by the concerned PI to raise a request to his/her respective NC (National Coordinator) and submit his course idea on SWAYAM by using “Submit Course Idea” link on home page to send a course creation request on SWAYAM platform. After the invitation, PI can create own profile on SWAYAM platform and upload the course.

After the submission, of course contents by the PI, NC will review and approve the course. After the approval by NC, the said course will be available/uploaded on the SWAYAM Platform.

PROCESS FOR REGISTRATION OF INSTITUTIONS AND CERTIFICATION OF COURSES ON SWAYAM PLATFORM

The institutes need to provide a scanned copy of approval by AICTE/UGC or any authorized body of Govt. of India. Documents need to be sent on email-Id “Support@swayam.gov.in”. After receiving the required documents, support team will review and add the **Institute** on SWAYAM Platform.

Course completion certification/Credit transfer will be available after the completion of Phase-2 of SWAYAM Project.

CONSTITUTION OF SWAYAM BOARD (SB)

MHRD vide letter No.8-1/2015-TEL, dated 13th April, 2017 has constituted SWAYAM Board (SB) consisting of administrators, reputed academicians and technical experts to administer/oversee the SWAYAM and the SWAYAM Prabha platforms. It would be responsible for laying down the policy regarding the technical aspects of both SWAYAM and

the SWAYAM Prabha including quality of content and its translation into regional languages etc.

ISSUE OF REVISED “MOOCs” GUIDELINES BY MHRD

With a view to providing access to the best quality learning resources across the Country, synergizing the quality of contents on SWAYAM Platform, standardizing the content delivery and for systematic development of the online Courses for SWAYAM, the Ministry of Human Resource Development (MHRD) has issued Revised “MOOCs” Guidelines on 1st June, 2017 replacing the old “MOOCs” Guidelines.

MoU with British Council

Even International Education Providers are keen to participate in the SWAYAM portal through Bi-directional operations. A MoU has been signed between AICTE (Through MHRD) and the British Council during the month of November 2016 to upload the online material developed under the E-QUAL project on the SWAYAM portal developed by MHRD and AICTE. British Council will work as a Coordinator with AICTE and promote SWAYAM portal to the U.K. Universities and encourage U.K. Universities to share their online education resources on the SWAYAM portal and devising a mechanism for credit transfer through jointly conducting a series of capacity development workshops for creation and delivery of MOOCs through SWAYAM. E-QUAL in partnership with AICTE had conducted “Teacher Training Workshop” on 15th & 16th March 2017 at AICTE HQ, New Delhi wherein the participants at UG faculty level attended. In addition to this, British Council has conducted seven regional workshops on “E-Learning: Challenges and Opportunities” across the Country followed by a National Seminar “Policy Dialogue on “Quality and Governance of ICT enabled education” on 11th May, 2017 at New Delhi.

Similar other requests are being received by AICTE/MHRD from various other agencies both in India and abroad for creating of e-contents/non-credit online courses to be uploaded on SWAYAM Platform which are under consideration.

FEATURES OF "SWAYAM" PLATFORM

- User Onboarding
- Student Sign up
- Faculty Invite & Sign up
- Co Faculty Invite & Sign up
- Teaching Assistant Invite & Sign Up
- Profile management
- Basic Profile
- Advanced Profile
- Multi Role
- Idea Management
- Course Idea Submission
- Course Idea Approval / Rejection
- Course Creation
- Public / Private Courses
- Scheduled / Self Paced Courses
- Grade settings
- Define Exam Locations & Dates
- Enable Pre and Post course survey
- Credits Framework
- Define Course Credit
- Define Course completion criteria
- Participation Certificate
- Exams
- Hall ticket management
- Upload Hall ticket templates
- Generate Hall tickets
- Student
- Enroll to a course
- Consume course content (Videos, Articles, Uploaded Files)
- Submit Assignments
- Take course tests
- Initiate & follow Discussions
- Dashboard & Calendar view of upcoming events
- Apply for Exam (Online Payment via Pay Gov or CCAvenue)
- Download completion certificate
- Course Coordinator
- Track course progress
- Invite & Manage Learners
- Grade assignments
- Mark course completion for learners
- Dashboard view of upcoming events
- National Coordinator
- View Reports
- Invite & Manage Faculty, Co-Faculty, Teaching Assistants
- Manage course announcements
- Manage certificates and marksheets
- Adjust exam fee payments

- Manage Grades
- Hall ticket Management
- Course idea Management
- Advisory Board persona
- Course idea Management
- Invite & Replace Support
- Support Persona
- Invite & Replace National Coordinator
- Invite & Replace Registrar
- Invite & Remove Advisory board member
- Reports
- Student Reports
- Educator Reports
- National Coordinator Reports
- MHRD Reports
- Mobile Apps (Andriod / iOS / UWP)
- Access static content
- Consume course content
- Take course tests

UPCOMING FEATURES

- Credit Transfers
- Registrar Persona
- News
- Grievances
- Recommended Courses

CURRENT STATUS OF "SWAYAM" COURSES AS ON 9th JUNE, 2017

• Total Courses	:	408
• Active Courses	:	168
• Courses Schedule completed	:	240
• Total no of Registered students	:	61484

The above courses are available through the following NCs:

- AICTE Course : 3
- CEC Course: 27
- IGNOU Course : 12
- IIMB Course: 9
- NCERT Course: 7
- NIOS Course: 14
- NPTEL Course: 282
- UGC Course: 54

Online Courses on SWAYAM listed to be launched w.e.f June 2017 (www.swayam.ac.in)

A. List of courses in Engineering

1

Discipline : Aerospace engineering
Course Name : Gas dynamics
Instructor : Prof. Sameen. A
Institute : IITM
Next Run Date JULY-OCT 2017

2

Discipline : Aerospace engineering
Course Name : Engineering Thermodynamics
Instructor : Prof. D. P. Mishra
Institute : IITK
Next Run Date : JULY-OCT 2017

3

Discipline : Aerospace engineering
Course Name : **Combustion** in air breathing engines
Instructor : **Prof. Swetaprovo** Chaudhuri
Institute : IISc
Next Run Date : JULY-OCT 2017

4

Discipline : Aerospace engineering
Course Name : **Aircraft** Design
Instructor : Prof. A.K.Ghosh
Institute : IITK
Next Run Date : JULY-OCT 2017

5

Discipline : Aerospace engineering
Course Name : Aircraft Stability and Control
Instructor : Prof. A.K.Ghosh
Institute : IITK
Next Run Date : JULY-OCT 2017

6

Discipline : Agriculture & Food Engineering
Course Name : Momentum transfer in process engineering
Instructor : Prof. Tridib **Kumar Goswami**
Institute : IITKGP
Next Run Date : JULY-OCT 2017

7

Discipline : Biological sciences & Biotechnology
Course Name : Biostatistics and design of experiments
Instructor : Prof. Mukesh Doble
Institute : IITM
Next Run Date : JULY-SEP 2017

8

Discipline : Biological sciences & Biotechnology
Course Name : Biomedical nanotechnology
Instructor : Prof. P.Gopinath
Institute : IITR
Next Run Date : JULY-AUG 2017

9

Discipline : Biological sciences & Biotechnology
Course Name : Introduction to mechanobiology
Instructor : Prof. Shamik Sen
Institute : IITB
Next Run Date : AUG-OCT 2017

10

Discipline : Biological sciences & Biotechnology
Course Name : Animal Physiology
Instructor : Prof. Mainak Das
Institute : IITK
Next Run Date : JULY-OCT 2017

11

Discipline : Biological sciences & Biotechnology
Course Name : Cell Culture Technologies
Instructor : Prof. Mainak Das
Institute : IITK
Next Run Date : AUG-OCT 2017

12

Discipline : Biological sciences & Biotechnology
Course Name : Forest Biometry
Instructor : Dr. Ankur Awadhya & Prof. Mainak Das
Institute : IITK
Next Run Date : AUG-OCT 2017

13

Discipline : Biological sciences &
Course Name : Industrial Biotechnology
Instructor : Prof. Debabrata Das
Institute : IITKGP
Next Run Date : JULY-OCT 2017

Biotechnology

14

Discipline : Chemical engineering
Course Name : Trace and ultra-trace analysis of metals using atomic absorption spectrometry
Instructor : Prof. J. R. Mudakavi
Institute : IISc
Next Run Date : JULY-SEP 2017

15

Discipline : Chemical engineering
Course Name : Introduction to evolutionary dynamics
Instructor : Prof. Supreet Saini
Institute : IITB
Next Run Date : JULY-SEP 2017



16

Discipline : Chemical engineering
Course Name : Phase equilibrium thermodynamics
Instructor : Prof. Gargi Das
Institute : IITKGP
Next Run Date : JULY-SEP 2017

17

Discipline : Chemical engineering
Course Name : Transport phenomena
Instructor : Prof. Sunando Dasgupta
Institute : IITKGP
Next Run Date : JULY-OCT 2017

18

Discipline : Chemical engineering
Course Name : Unit operations of particulate matter
Instructor : Prof. Shabina Khanam
Institute : IITR
Next Run Date : JULY-AUG 2017

19

Discipline : Chemistry and biochemistry
Course Name : Basics of Fluorescence Spectroscopy
Instructor : Prof. Pratik Sen
Institute : IITK
Next Run Date : JULY-SEP 2017

20

Discipline : Chemistry and biochemistry
Course Name : Laser: Fundamentals and Applications
Instructor : Prof. Manabendra Chandra
Institute : IITK
Next Run Date : AUG-OCT 2017

21

Discipline : Chemistry and biochemistry
Course Name : Chemical and biological thermodynamics: principles to applications
Instructor : Prof. Nand Kishore
Institute : IITB
Next Run Date : JULY-OCT 2017

22

Discipline : Chemistry and biochemistry
Course Name : Analytical chemistry
Instructor : Prof. Debashis Ray
Institute : IITKGP
Next Run Date : JULY-OCT 2017

23

Discipline : Chemistry and biochemistry
Course Name : Co-ordination chemistry (chemistry of transition elements)
Instructor : Prof. Debashis Ray
Institute : IITKGP
Next Run Date : JULY-OCT 2017

24

Discipline : Chemistry and biochemistry
Course Name : Stereochemistry
Instructor : Prof. Amit Basak
Institute : IITKGP
Next Run Date : JULY-SEP 2017

25

Discipline : Chemistry
Course Name : Advanced Mathematical Methods for Chemistry
Instructor : Prof. Madhav Ranganathan
Institute : IITK
Next Run Date : JULY-OCT 2017

26

Discipline : Civil engineering
Course Name : Project planning and control
Instructor : Prof. Koshy Varghese
Institute : IITM
Next Run Date : JULY-SEP 2017

27

Discipline : Civil engineering
Course Name : Geotechnical engineering laboratory
Instructor : Prof. J. N. Mandal
Institute : IITB
Next Run Date : JULY-AUG 2017

28

Discipline : Civil engineering
Course Name : Mechanics of Solids
Instructor : Prof. Priyanka Ghosh
Institute : IITK
Next Run Date : JULY-OCT 2017

29

Discipline : Civil engineering
Course Name : Principles of Construction
Instructor : Prof. Sudhir Misra
Institute : IITK
Next Run Date : AUG-OCT 2017

30

Discipline : Civil engineering
Course Name : Foundation Design
Instructor : Prof. N.R. Patra
Institute : IITK
Next Run Date : JULY-OCT 2017

31

Discipline : Civil engineering
Course Name : Integrated Waste **Discipline** : Management for a Smart City
Instructor : Prof. Brajesh Kumar Dubey
Institute : IITKGP
Next Run Date : JULY-OCT 2017



32

Discipline : Civil engineering
Course Name : Computational hydraulics
Instructor : Prof. Anirban Dhar
Institute : IITKGP
Next Run Date : JULY-OCT 2017

33

Discipline : Civil engineering
Course Name : Design of steel structures
Instructor : Prof. Damodar Maiti
Institute : IITKGP
Next Run Date : JULY-OCT 2017

34

Discipline : Civil engineering
Course Name : Strength of materials
Instructor : Prof. Sriman Kumar Bhattacharya
Institute : IITKGP
Next Run Date : JULY-OCT 2017

35

Discipline : Civil engineering
Course Name : Design of reinforced concrete structures
Instructor : Prof. Nirjhar Dhang
Institute : IITKGP
Next Run Date : JULY-OCT 2017

36

Discipline : Civil engineering
Course Name : Reinforced Concrete Road Bridges
Instructor : Prof. Nirjhar Dhang
Institute : IITKGP
Next Run Date : JULY-AUG 2017

37

Discipline : Civil engineering
Course Name : Structural analysis i
Instructor : Prof. Amit Shaw
Institute : IITKGP
Next Run Date : JULY-OCT 2017

38

Discipline : Earth science
Course Name : Digital Image Processing of Remote Sensing Data
Instructor : Prof. Arun K. Saraf
Institute : IITR
Next Run Date : JULY-AUG 2017

39

Discipline : Civil engineering
Course Name : Geoenvironmental Engineering (Environmental Geotechnology): Landfills, Slurry Ponds & Contaminated Sites
Instructor : Prof. Manoj Datta
Institute : IITD

Next Run Date : JULY-OCT 2017

40

Discipline : Computer science and engineering
Course Name : Computer architecture and organization
Instructor : Prof. Indranil Sengupta & Prof. Kamalika Datta
Institute : IITKGP
Next Run Date : JULY-OCT 2017

41

Discipline : Computer science and engineering
Course Name : An introduction to algorithm and analysis
Instructor : Prof. Sourav Mukhopadhyay
Institute : IITKGP
Next Run Date : JULY-OCT 2017

42

Discipline : Computer science and engineering
Course Name : Hardware modeling using verilog
Instructor : Prof. Indranil Sengupta
Institute : IITKGP
Next Run Date : AUG-OCT 2017

43

Discipline : Computer science and engineering
Course Name : Introduction to internet of things
Instructor : Prof. Sudip Misra
Institute : IITKGP
Next Run Date : JULY-OCT 2017

44

Discipline : Computer science and engineering
Course Name : Cloud computing
Instructor : Prof. Soumya Kanti Ghosh
Institute : IITKGP
Next Run Date : AUG-OCT 2017

45

Discipline : Computer science and engineering
Course Name : Programming in C++
Instructor : Prof. Partha Pratim Das
Institute : IITKGP
Next Run Date : JULY-SEP 2017

46

Discipline : Computer science and engineering
Course Name : Object oriented analysis and design
Instructor : Prof. Partha Pratim Das
Institute : IITKGP
Next Run Date : JULY-SEP 2017

47

Discipline : Computer science and engineering
Course Name : Introduction to Machine Learning
Instructor : Prof. Sudeshna Sarkar
Institute : IITKGP
Next Run Date : JULY-SEP 2017

48

Discipline : Computer science and engineering
Course Name : Design and analysis of algorithms
Instructor : Prof. Madhavan Mukund
Institute : CMI
Next Run Date : JULY-SEP 2017

49

Discipline : Computer science and engineering
Course Name : Programming, data structures and algorithms using python
Instructor : Prof. Madhavan Mukund
Institute : CMI
Next Run Date : JULY-SEP 2017

50

Discipline : Computer science and engineering
Course Name : Introduction to operating systems
Instructor : Prof. Chester Robeiro
Institute : IITM
Next Run Date : JULY-SEP 2017

51

Discipline : Computer science and engineering
Course Name : Ai: search methods for problem solving
Instructor : Prof. Deepak Khemani
Institute : IITM
Next Run Date : JULY-OCT 2017

52

Discipline : Computer science and engineering
Course Name : Privacy and Security in Online Social Media
Instructor : Prof. Ponnurangam.K
Institute : IIITD
Next Run Date : JULY-OCT 2017

53

Discipline : Computer science and engineering
Course Name : Software testing
Instructor : Prof. Meenakshi D'souza
Institute : IIITB
Next Run Date : JULY-OCT 2017

54

Discipline : Computer science and engineering
Course Name : Fundamentals of Database Systems
Instructor : Prof. Arnab Bhattacharya
Institute : IITK
Next Run Date : JULY -SEP 2017

55

Discipline : Computer science and engineering
Course Name : Modern Compilers - Theory and Practice
Instructor : Prof. V. Krishna Nandivada
Institute : IITM
Next Run Date : JULY-OCT 2017

56

Discipline : Computer science and engineering
Course Name : Theory of Computation
Instructor : Prof. Raghunath Tewari
Institute : IITK
Next Run Date : JULY -SEP 2017

57

Discipline : Computer science and engineering
Course Name : Computer Organization
Instructor : Prof. Kamakoti
Institute : IITM
Next Run Date : JULY-OCT 2017

58

Discipline : Computer science and engineering
Course Name : Introduction To Cryptology
Instructor : Prof. S. Gangopadhyay
Institute : IITR
Next Run Date : JULY-AUG 2017

59

Discipline : Electrical /Electronics/Communications Engg
Course Name : Introduction to Wireless and Cellular Communications
Instructor : Prof. David Kovil Pillai
Institute : IITM
Next Run Date : JULY-OCT 2017

60

Discipline : Computer science and engineering
Course Name : Model Checking
Instructor : Prof. B.Srivathsan
Institute : CMI
Next Run Date : JULY-OCT 2017

61

Discipline : Computer science and engineering
Course Name : Introduction to Parallel Programming in OpenMP
Instructor : Prof. Yogish Sabharwal
Institute : IITD
Next Run Date : AUG-SEP 2017

62

Discipline : Electrical / Electronics/ Communications Engg.
Course Name : Optimal control
Instructor : Prof. Barjeev Tyagi
Institute : IITR
Next Run Date : JULY-SEP 2017

63

Discipline : Electrical / Electronics/ Communications Engg.
Course Name : Controls engineering
Instructor : Prof. Ramkrishna.P
Institute : IITM

Next Run Date : JULY-OCT 2017

64

Discipline : Electrical / Electronics/ Communications Engg.

Course Name : Basic electrical circuits

Instructor : Prof. Nagendra Krishnapura

Institute : IITM

Next Run Date : JULY-OCT 2017

65

Discipline : Electrical / Electronics/ Communications Engg.

Course Name : Analog circuits

Instructor : Prof. Nagendra Krishnapura

Institute : IITM

Next Run Date : JULY-OCT 2017

66

Discipline : Electrical / Electronics/ Communications Engg.

Course Name : Networks and systems

Instructor : Prof. Andrew Thangaraj and Prof.C.S.Ra-
maingam

Institute : IITM

Next Run Date : JULY-OCT 2017

67

Discipline : Electrical / Electronics/ Communications Engg.

Course Name : Microwave integrated circuits

Instructor : Prof. Jayanta Mukherjee

Institute : IITB

Next Run Date : JULY-SEP 2017

68

Discipline : Electrical / Electronics/ Communications Engg.

Course Name : Principles of Communication Systems:
Part - II

Instructor : Prof. Aditya K. Jagannatham

Institute : IITK

Next Run Date : JULY-SEP 2017

69

Discipline : Electrical / Electronics/ Communications Engg.

Course Name : Applied Electromagnetics for Engineers

Instructor : Prof. Pradeep Kumar

Institute : IITK

Next Run Date : JULY-OCT 2017

70

Discipline : Electrical / Electronics/ Communications Engg.

Course Name : Estimation for Wireless Communications
– MIMO/OFDM Cellular and Sensor Networks

Instructor : Prof. Aditya K. Jagannatham

Institute : IITK

Next Run Date : JULY -SEP 2017

71

Discipline : Electrical / Electronics/ Communications Engg.

Course Name : Design for internet of things

Instructor : Prof. T V Prabhakar

Institute : IISc

Next Run Date : JULY-SEP 2017

72

Discipline : High Voltage Engg.(Electrical Engg.)

Course Name : Advances in UHV Transmission and Dis-
tribution

Instructor : Prof Subba Reddy B

Institute : IISc

Next Run Date : JULY-SEP 2017

73

Discipline : Electrical / Electronics/ Communications Engg.

Course Name : Computational Electromagnetics & Appli-
cations

Instructor : Prof. Dr. Krish Sankaran

Institute : IITM

Next Run Date : JULY-OCT 2017

74

Discipline : Electrical /Electronics/Communications Engg.

Course Name : Enclosure design of electronics equipment

Instructor : Prof. N. V Chalapathi Rao

Institute : IISc

Next Run Date : JULY-OCT 2017

75

Discipline : Electrical /Electronics/Communications Engg.

Course Name : Design of photovoltaic systems

Instructor : Prof. L Umanand

Institute : IISc

Next Run Date : JULY-OCT 2017

76

Discipline : Electrical /Electronics/Communications Engg.

Course Name : Photonic integrated circuits

Instructor : Prof. T. Srinivas

Institute : IISc

Next Run Date : JULY-AUG 2017

77

Discipline : : Electrical /Electronics/Communications Engg.

Course Name : Power system analysis

Instructor : Prof. Debapriya Das

Institute : IITKGP



Next Run Date : JULY-OCT 2017

78

Discipline : Electrical /Electronics/Communications Engg.

Course Name : Industrial instrumentation

Instructor : Prof. Alok Barua

Institute : IITKGP

Next Run Date : JULY-OCT 2017

79

Discipline : Electrical /Electronics/Communications Engg.

Course Name : Electrical machines - i

Instructor : Prof. D Kastha/Prof. Suman Maiti

Institute : IITKGP

Next Run Date : JULY-OCT 2017

80

Discipline : Electrical /Electronics/Communications Engg.

Course Name : Analog communication

Instructor : Prof. Goutam Das

Institute : IITKGP

Next Run Date : JULY-OCT 2017

81

Discipline : Electrical /Electronics/Communications Engg.

Course Name : Modern digital communication techniques

Instructor : Prof. Suvra Sekhar Das

Institute : IITKGP

Next Run Date : JULY-OCT 2017

82

Discipline : Electrical /Electronics/Communications Engg.

Course Name : Digital speech processing

Instructor : Prof. Shyamal Kumar Das Mandal

Institute : IITKGP

Next Run Date : AUG-OCT 2017

83

Discipline : Electrical /Electronics/Communications Engg.

Satellite communication

Instructor : Prof. Kalyan Kumar Bandyopadhyay

Institute : IITKGP

Next Run Date : JULY-SEP 2017

84

Discipline : Electrical /Electronics/Communications Engg.

Course Name : Analog Circuits and Systems through SPICE Simulation

Instructor : Prof. Mrigank Sharad

Institute : IITKGP

Next Run Date : JULY-SEP 2017

85

Discipline : Electrical /Electronics/Communications Engg.

Course Name : An Introduction to Information Theory

Instructor : Prof. Adrish Banerjee

Institute : IITK

Next Run Date : JULY-SEP 2017

86

Discipline : Humanities and Social Sciences

Course Name : Soft skills

Instructor : Prof. Binod Mishra

Institute : IITR

Next Run Date : JULY-OCT 2017

87

Discipline : Humanities and Social Sciences

Course Name : Technical English for engineers

Instructor : Prof. Aysha Iqbal

Institute : IITM

Next Run Date : JULY-SEP 2017

88

Discipline : Humanities and Social Sciences

Course Name : Literature for competitive exams

Instructor : Prof. Aysha Iqbal

Institute : IITM

Next Run Date : JULY-SEP 2017

89

Discipline : Humanities and Social Sciences

Course Name : Applied linguistics

Instructor : Prof. Rajesh Kumar

Institute : IITM

Next Run Date : JULY-OCT 2017

90

Discipline : Humanities and Social Sciences

Course Name : Cognition, Transformation and Lives

Instructor : Dr. Alok Bajpai

Institute : IITK

Next Run Date : JULY-AUG 2017

91

Discipline : Humanities and Social Sciences

Course Name : Visual Perception and Art: A Survey Across the Cultures

Instructor : Prof. Soumik Nandy Majumdar

Institute : IITK

Next Run Date : JULY-AUG 2017

92

Discipline : Humanities and Social Sciences

Course Name : Introduction to Basic Cognitive Processes

Instructor : Prof. ARK Verma

Institute : IITK

Next Run Date : JULY-SEP 2017

93

Discipline : Humanities and Social Sciences

Course Name : Calculus of One Real Variable

Instructor : Prof. Joydeep Dutta

Institute : IITK

Next Run Date : AUG-OCT 2017

94

Discipline : Humanities and Social Sciences

Course Name : Science, Technology and Society

Instructor : Prof. Sambit Mallick

Institute : IITG

Next Run Date : JULY-OCT 2017

95

Discipline : Humanities and Social Sciences

Course Name : Gender and Literature

Instructor : Prof. Avishek Parui

Institute : IITG

Next Run Date : JULY-SEP 2017

96

Discipline : Humanities and Social Sciences

Course Name : Ecology and Society

Instructor : Prof. Ngamjahao Kipgen

Institute : IITG

Next Run Date : JULY-OCT 2017

97

Discipline : Humanities and Social Sciences

Course Name : History of English Language and Literature

Instructor : Prof. Merin Simi Raj

Institute : IITM

Next Run Date : JULY-OCT 2017

98

Discipline : Humanities and Social Sciences

Course Name : Introduction to Psychology

Instructor : Prof. Braj Bhushan

Institute : IITK

Next Run Date : JULY -SEP 2017

99

Discipline : Humanities and Social Sciences

Course Name : Developing Soft Skills and Personality

Instructor : Prof. T. Ravichandran

Institute : IITK

Next Run Date : JULY-SEP 2017

100

Discipline : Humanities and Social Sciences

Course Name : Human resource development

Instructor : Prof. KBL Srivastava

Institute : IITKGP

Next Run Date : JULY-OCT 2017

101

Discipline : Humanities and Social Sciences

Course Name : Educational leadership

Instructor : Prof. Atasi Mohanty

Institute : IITKGP

Next Run Date : JULY-SEP 2017

102

Discipline : Management

Course Name : Operations and supply chain

Instructor : Prof. G.srinivasan

Institute : IITM

Next Run Date : JULY-OCT 2017

103

Discipline : Management

Course Name : Patent Law for Engineers and Scientists

Instructor : Prof. Feroze Ali

Institute : IITM

Next Run Date : JULY-OCT 2017

104

Discipline : Management

Course Name : Marketing research and analysis

Instructor : Prof. J.K.Nayak

Institute : IITR

Next Run Date : JULY-SEP 2017

105

Discipline : Management

Course Name : Project **Discipline** : Management for managers

Instructor : Prof. Mukesh Kumar Barua

Institute : IITR

Next Run Date : JULY-OCT 2017

106

Discipline : Management

Course Name : Total Quality **Discipline** : Management - I

Instructor : Prof. Raghu Nandan Sengupta

Institute : IITK

Next Run Date : AUG-OCT 2017

107

Discipline : Management

Course Name : Gender justice and workplace security

Instructor : Prof. Dipa Dube

Institute : IITKGP

Next Run Date : JULY-AUG 2017

108

Discipline : Management

Course Name : Corporate social responsibility

Instructor : Prof. Aradhna Malik

Institute : IITKGP

Next Run Date : JULY-SEP 2017

109

Discipline : Management

Course Name : Decision modeling

Instructor : Prof. Biswajit Mohanty

Institute : IITKGP

Next Run Date : JULY-SEP 2017

110

Discipline : Management

Course Name : E-business

Instructor : Prof. Mamata Jenamani

Institute : IITKGP

Next Run Date : JULY-OCT 2017

111

Discipline : Management

Course Name : Six sigma

Instructor : Prof. Jitesh J Thakkar

Institute : IITKGP

Next Run Date : JULY-OCT 2017

112

Discipline : Management

Course Name : Introduction to Data Analytics

Instructor : Prof. Nandan Sudarsanam Prof. Balaraman avindran

Institute : IITM

Next Run Date : JULY-SEP 2017

113

Discipline : Mathematics

Course Name : Differential equations

Instructor : Prof. Srinivasa Manam

Institute : IITM

Next Run Date : JULY-OCT 2017

114

Discipline : Mathematics

Course Name : Integral equations, calculus of variations and its applications

Instructor : Prof. P. N Agarwal Prof.D. N Pandey

Institute : IITR

Next Run Date : JULY-OCT 2017

115

Discipline : Mathematics

Course Name : Nonlinear programming

Instructor : Prof. S. K Gupta

Institute : IITR

Next Run Date : JULY-AUG 2017

116

Discipline : Mathematics

Course Name : Numerical methods

Instructor : Prof. Ameeya Kumar Nayak, Prof. Sanjeev Kumar

Institute : IITR

Next Run Date : JULY-SEP 2017

117

Discipline : Mathematics

Course Name : Measure theory

Instructor : Prof. Inder Kumar Rana

Institute : IITB

Next Run Date : JULY-OCT 2017

118

Discipline : Mathematics

Course Name : Numerical Analysis

Instructor : Prof. R. Usha

Institute : IITM

Next Run Date : JULY-OCT 2017

119

Discipline : Mathematics

Course Name : Introduction to R Software

Instructor : Prof. Shalabh

Institute : IITK

Next Run Date : JULY-SEP 2017

120

Discipline : Mathematics

Course Name : Constrained and unconstrained optimization

Instructor : Prof. A Goswami & Prof. Debjani Chakraborty

Institute : IITKGP

Next Run Date : JULY-OCT 2017

121

Discipline : Mathematics

Course Name : Graph Theory

Instructor : Prof. Soumen Maity

Institute : IISER PUNE

Next Run Date : AUG-OCT 2017

122

Discipline : Mathematics

Course Name : Regression analysis

Instructor : Prof. Soumen Maity

Institute : IISER PUNE

Next Run Date : JULY-OCT 2017

123

Discipline : Mechanical / Industrial/ Materials science and

Course Name : Iron making

Instructor : Prof. Govind S. Gupta

Institute : IISc

Next Run Date : JULY-SEP 2017

Engineering

124

Discipline : Mechanical / Industrial/ Materials science and engineering

Course Name : Heat Treatment and Surface Hardening - II

Instructor : Prof. Kallol Mondal & Sandeep Sangal

Institute : IITK
Next Run Date : AUG-OCT 2017

125
Discipline : **Discipline** : Mechanical / Industrial/ Materials science and engineering
Course Name : Phase Transformation in Materials
Instructor : Prof. Krishanu Biswas
Institute : IITK
Next Run Date : JULY-OCT 2017

126
Discipline : **Discipline** : Mechanical / Industrial/ Materials science and engineering
Course Name : Fundamentals of manufacturing processes
Instructor : Prof. D K Dwivedi
Institute : IITR
Next Run Date : JULY-OCT 2017

127
Discipline : **Discipline** : Mechanical / Industrial/ Materials science and engineering
Course Name : Fluid dynamics and turbomachines
Instructor : Prof. Dhiman Chatterjee and Prof. Shami Bakshi
Institute : IITM
Next Run Date : JULY-SEP 2017

128
Discipline : **Discipline** : Mechanical / Industrial/ Materials science and engineering
Course Name : Engineering fracture mechanics
Instructor : Prof. K.Ramesh
Institute : IITM
Next Run Date : JULY-OCT 2017

129
Discipline : **Discipline** : Mechanical / Industrial/ Materials science and engineering
Course Name : Foundation of computational fluid dynamics
Instructor : Prof. S. Vengadesan
Institute : IITM
Next Run Date : JULY-SEP 2017

130
Discipline : **Discipline** : Mechanical / Industrial/ Materials science and engineering
Course Name : Micro and nano scale energy transport
Instructor : Prof. Arvind Pattamatta
Institute : IITM
Next Run Date : JULY-OCT 2017

131
Discipline : **Discipline** : Mechanical / Industrial/ Materials science and engineering
Course Name : Manufacturing of Composites
Instructor : Prof. J. Ramkumar

Institute : IITK
Next Run Date : JULY-SEP 2017

132
Discipline : **Discipline** : Mechanical / Industrial/ Materials science and engineering
Course Name : Applied Ergonomics
Instructor : Prof. Shantanu Bhattacharya & A. Gupta
Institute : IITK
Next Run Date : JULY-SEP 2017

133
Discipline : **Discipline** : Mechanical / Industrial/ Materials science and engineering
Course Name : Nature and Properties of Materials
Instructor : Prof. Bishakh Bhattacharya
Institute : IITK
Next Run Date : JULY -SEP 2017

134
Discipline : **Discipline** : Mechanical / Industrial/ Materials science and engineering
Course Name : Mathematical Methods in Engineering and Science
Instructor : Prof. Bhaskar Dasgupta
Institute : IITK
Next Run Date : JULY-OCT 2017

135
Discipline : **Discipline** : Mechanical / Industrial/ Materials science and
Course Name : Electron diffraction and imaging
Instructor : Prof. Sundararaman M
Institute : IITM
Next Run Date : JULY-OCT 2017
engineering

136
Discipline : **Discipline** : Mechanical / Industrial/ Materials science and engineering
Course Name : Mechatronics systems
Instructor : Prof. Manivannan.P.V
Institute : IITM
Next Run Date : JULY-SEP 2017

137
Discipline : **Discipline** : Mechanical / Industrial/ Materials science and engineering
Course Name : Acoustic and Noise Control
Instructor : Prof. Abijith Sarkar
Institute : IITM
Next Run Date : JULY-OCT 2017

138
Discipline : **Discipline** : Mechanical / Industrial/ Materials science and engineering
Course Name : Manufacturing Systems and Sustainability: An Applied Approach

Instructor : Prof. Deepu Philip
Institute : IITK
Next Run Date : AUG-OCT 2017

139
Discipline : Mechanical/ Chemical Engineering
Course Name : Convective Heat Transfer
Instructor : Prof. Saptarshi Basu
Institute : IISc
Next Run Date : JULY-OCT 2017

140
Discipline : Mechanical / Industrial/ Materials science and engineering
Course Name : Modeling and simulation of discrete event system
Instructor : Prof. P. Kumar Jha
Institute : IITR
Next Run Date : JULY-SEP 2017

141
Discipline : Mechanical / Industrial/ Materials science and engineering
Course Name : Processing of Polymers and Polymer Composites
Instructor : Prof. Inderdeep Singh
Institute : IITR
Next Run Date : JULY-SEP 2017

142
Discipline : Mechanical / Industrial/ Materials science and engineering
Course Name : Fundamentals of Material Processing - I
Instructor : Prof. Shashank Shekhar
Institute : IITK
Next Run Date : JULY -SEP 2017

143
Discipline : Mechanical / Industrial/ Materials science and engineering
Course Name : Steel Quality : Role of Secondary Refining & Continuous Casting
Instructor : Prof. Santanu Kr. Ray
Institute : IITM
Next Run Date : AUG-OCT 2017

144
Discipline : Mechanical / Industrial/ Materials science and engineering
Course Name : X-ray Crystallography & Diffraction
Instructor : Prof. Ranjit Kumar Ray
Institute : IEST Shibpur
Next Run Date : JULY-OCT 2017

145
Discipline : Mechanical / Industrial/ Materials science and engineering
Course Name : Noise Management & Control

Instructor : Prof. Nachiketa Tiwari
Institute : IITK
Next Run Date : JULY-OCT 2017

146
Discipline : Mechanical / Industrial/ Materials science and engineering
Course Name : Manufacturing System Technology Part 1 & 2
Instructor : Prof. Shantanu Bhattacharya
Institute : IITK
Next Run Date : JULY-OCT 2017

147
Discipline : Mechanical / Industrial/ Materials science and engineering
Course Name : Refrigeration And Air-conditioner
Instructor : Prof. Ravi Kumar
Institute : IITR
Next Run Date : JULY-SEP 2017

148
Discipline : Mechanical / Industrial/ Materials science and engineering
Course Name : Spur and helical gear cutting
Instructor : Prof. Asimava Roychoudhury
Institute : IITKGP
Next Run Date : JULY-AUG 2017

149
Discipline : Mechanical / Industrial/ Materials science and engineering
Course Name : Laws of thermodynamics
Instructor : Prof. S.K Som & Prof.Suman Chakraborty
Institute : IITKGP
Next Run Date : JULY-AUG 2017

150
Discipline : Mechanical / Industrial/ Materials science and engineering
Course Name : Energy conservation and waste heat recovery
Instructor : Prof. PK Das & Prof. A Bhattacharya
Institute : IITKGP
Next Run Date : JULY-OCT 2017

151
Discipline : Multidisciplinary
Course Name : Biology for engineers and other non-biologists
Instructor : Prof. G.K.Suraishkumar/ Prof.Madhulika Dixit
Institute : IITM
Next Run Date : JULY-AUG 2017

152
Discipline : Multidisciplinary
Course Name : Introduction to research

Instructor : Prof. Prathap Haridoss

Institute : IITM

Next Run Date : JULY-SEP 2017

153

Discipline : Multidisciplinary

Course Name : Health research fundamentals

Multi Faculty

Institute : NIE

Next Run Date : JULY-SEP 2017

154

Discipline : Multidisciplinary

Course Name : Outcome based pedagogic principles for effective teaching

Instructor : Prof. Shyamal Kumar Das Mandal

Institute : IITKGP

Next Run Date : JULY-AUG 2017

155

Discipline : Physics

Course Name : Quantum Information and Computing

Instructor : Prof. Dipan Ghosh

Institute : IITB

Next Run Date : JULY-SEP 2017

156

Discipline : Physics

Course Name : **Discipline** : Mathematics methods in Physics-I

Instructor : Prof. Samudra Roy

Institute : IITKGP

Next Run Date : JULY-OCT 2017

157

Discipline : Physics

Course Name : Classical mechanics: from newtonian to lagrangian formulation

Instructor : Prof. Debamalya Banerjee

Institute : IITKGP

Next Run Date : JULY-OCT 2017

158

Discipline : Physics

Course Name : Solid state physics

Instructor : Prof. Amal Kumar Das

Institute : IITKGP

Next Run Date : JULY-OCT 2017

B. List of **Discipline** : Management Courses

1

Course Name : Introduction to Investments

PI Name : SG Badrinath

Institute : IIM Bangalore

Next Run Date :5th October 2017

2

Course Name : Discipline : Management Accounting for Decision-making

PI Name : MS Narasimhan

Institute :IIM Bangalore

Next Run Date :5th October 2017

3

Course Name :Introduction to Marketing Essentials

PI Name : Ashis Mishra

Institute :IIM Bangalore

Next Run Date : 5th September 2017

4

Discipline : Management

Course Name :Customer Relationship

PI Name : Shainesh

Institute :IIM Bangalore

Next Run Date :5th October 2017

5

Course Name : Introduction to Corporate Finance

PI Name : Ashok Thampy

Institute : IIM Bangalore

Next Run Date :5th November 2017

6

Course Name : Predictive Analytics

PI Name : Dinesh Kumar

Institute : IIM Bangalore

Next Run Date :25th November 2017

7

Course Name : Introduction to Strategic

Discipline : Management

PI Name : PD Jose

Institute : IIM Bangalore

Next Run Date : 5th December 2017

8

Course Name : Strategy and Sustainability

PI Name : PD Jose

Institute : IIM Bangalore

Next Run Date : 5th January 2018

9

Course Name : Organization Design for Competitive Advantage

PI Name : Sourav M

IIM Bangalore

5th February 2018

10

Course Name : Managerial Economics

PI Name : Subhashish Gupta

Institute : IIM Bangalore

IIM Bangalore

Next Run Date : 5th March 2018

