

**MINUTES OF 26<sup>th</sup> ACADEMIC COUNCIL MEETING**

**Date : Friday, 12<sup>th</sup> May, 2023, at 02.00 p.m.**

**Venue : Board Room, CMPICA, CHARUSAT, Changa**

The 26<sup>th</sup> meeting of Academic Council of Charotar University of Science and Technology (CHARUSAT) was held on Friday, 12<sup>th</sup> May, 2023 at 02.00 p.m. in offline mode at Board Room of CMPICA, CHARUSAT.

Following members were remained present:

1	Dr. R.V. Upadhyay	Chairman	Provost
2	Dr. B.G. Patel	Member	Advisor, Charusat
3	Dr. Datta Madamwar	Invitee	Scientific Advisor
4	Dr. Vijay Chaudhary	Member	Dean, Faculty of Technology & Engineering & Chairman, BoS in ME & HoD
5	Dr. Sanskruti Patel	Member	Dean, Faculty of Computer Science and Applications
6	Dr. Samir Patel	Member	Dean, Faculty of Pharmacy
7	Dr. Reshma Sable	Member	Dean, Faculty of Management Studies & Chairman, BoS in Human Resource Management
8	Dr. Bhaskar Pandya	Member	Dean, Faculty of Humanities
9	Dr. Darshan Patel	Member	Dean, Research & Principal, P.D. Patel Institute of Applied Sciences
10	Dr. Trushit Upadhyay	Member	Principal, Chandubhai S. Patel Institute of Technology
11	Dr. Amit Nayak	Member	Principal, Devang Patel Intitute of Advance Technology and Research
12	Dr. Balaganapathy	Member,	Principal, Ashok and Rita Patel Institute of Physiotherapy & Chairman, BoS in Physiotherapy
13	Dr. Hemant Kumar	Member,	Principal, Bapubhai Desaibhai Patel Institute of Paramedical Sciences
14	Dr. Manan Raval	Member	Principal, Ramanbhai Patel College of Pharmacy
15	Dr. Dharmendra Patel	Member	Principal, Smt Chandaben M Patel Institute of Computer Applicaions and Chairman, BoS in Computer Science and Applications
16	Dr. Anil Sharma	Member	Principal, Manikaka Topawala Instt of Nursing & Chairman, BoS in Nursing
17	Dr. Binit Patel	Member	Principal, Indukaka Ipcowala Institute of Management & Chairman, BoS in Busi. Analytics
18	Dr. J.P. Chaudhari	Member	Coordinator, Charusat Space Research and Technology Centre
19	Dr. Kinnari Parekh	Member	HoD, Dr.K.C. Patel Research & Development Centre
20	Dr. Ashwin Makwana	Member	HoD, Human Resource Development Centre
21	Mr. Robert Parmar	Member	Coordinator, Charusat Rural Education Development program
22	Dr. Mayur Sutaria	Member	Coordinator, IQAC

23	Dr. Vijay Panchal	Member	Chairman, BoS in Civil Engineering & HoD
24	Dr. Palash Mandal	Member	Teacher, P.D. Patel Institute of Applied Sciences
25	Dr. Mrunali Patel	Member	Teacher, Faculty of Pharmacy
26	Dr. Prakash V.	Member	Teacher, Faculty of Medical Sciences
27	Dr. Nilay Patel	Member	Chairman, Board of Studies in EE, HoD & Chairman, BoS in Foundation Courses,
28	Dr. Upesh Patel	Member	Chairman, Board of Studies in EC Engineering & HoD
29	Dr. Ritesh Patel	Member	Chairman, Board of Studies in Computer Engineering & HoD
30	Dr. Amit Thakkar	Member	Chairman, BoS in Computer Science and Engineering & HoD
31	Dr. Jalpa Suthar	Member	Chairman, BoS in Pharmacology and Clinical Pharmacy
32	Dr. Rashmin Patel	Member	Chairman, BoS in Pharmaceutical Chemistry and Pharmacognosy
33	Dr. Abhishek Dadhania	Member	Chairman, BoS in Chemical Science
34	Dr. Aditi Buch	Member	Chairman, BoS in Biological Science
35	Dr. C.K. Sumesh	Member	Chairman, BoS in Physical Science
36	Ms. Hiral Patel	Member	Chairman, BoS in Entrepreneurship and New Venture Management
37	Dr. Sheetal Thomas	Member	Chairman, BoS in Finance Management
38	Dr. Bhaveshkumar Parmar	Member	Chairman, BoS in Marketing Management
39	Dr. Jaydevsinh Pargara	Member	Chairman, BoS in Optometry
40	Dr. Dhara Patel	Member	Chairman, BoS in Medical Laboratory Technology
41	Dr. Nirav Bhatt	Invitee	Associate Professor, Department of IT, Charusat
42	Dr. Abhilash Shukla	Invitee	OSD, Exam Section
43	Dr. Mukesh Patel	Invitee	Eminent person
44	Dr. R. Manjunath	Invitee	Eminent person
45	Dr. Atul Patel	Member Secretary	Registrar

Following members could not remain present.

1.	Dr. M.C. Patel	Special Invitee	Secretary, Kelavani Mandal
2	Shri H.T. Patel	Member	Board of Management Member
3	Shri Virendrabhai Patel	Member	Governing Body Member
4	Shri Ashok R. Patel	Member	Advisor, Charusat
5	Dr. Y.P. Kosta	Member	Director, University Research Cell
6	Dr. R.M. Patel	Member	Coordinator, Ph.D. Programs
7	Dr. Dhruv Dave	Member	Dean, Faculty of Medical Sciences
8	Dr. Gayatri Dave	Member	Dean, Faculty of Science

9	Dr. Parth Shah	Member	Chairman, BoS in Information Technology Engineering & HoD
10	Dr. Gayatri Patel	Member	Chairman, BoS in Pharmaceuticals
11	Dr. Krunal Kachhia	Member	Chairman, BoS in Mathematical Science
12	Dr. Karan Morje	Member	Chairman, BoS in Operation Theatre and Anesthesia Technology
13	Dr. Dolly Sharma	Member	Chairman, BoS in Medical Radiology and Imaging Technology

## **INITIATION:**

The Provost welcomed all the members and invitees to the 26<sup>th</sup> Academic Council Meeting. The meeting proceeded with the agenda.

The Registrar requested all members to be sincere on the action to be taken items on the resolutions that will be made during discussion of this Academic Council meeting. He further pointed out that in this agenda there are one or two items where no action were taken on the resolution passed in previous Academic Council meeting.

## **AGENDA, PROCEEDINGS AND RESOLUTIONS:**

**Agenda No.26.23.01:** **For confirmation:** Minutes of 25<sup>th</sup> Academic Council Meeting held on Friday, 16<sup>th</sup> December, 2022

### **Proceeding & Resolution No.26.23.01:**

The 25<sup>th</sup> Meeting of Academic Council was held on 16<sup>th</sup> December, 2022. The minutes were circulated on 22<sup>nd</sup> December 2022. As there were no comments received from any member, the minutes were confirmed by the Academic Council.

**Agenda No.26.23.02: For confirmation:** Action taken on the agenda items of the 25<sup>th</sup> Academic Council Meeting.

### **Proceeding and resolution No.26.23.02:**


- (a) Under agenda item no.25.22.03 (1), the Council noted the information and directed to the Dean, FTE to submit detailed project proposal for the design thinking course.
- (b) Under agenda item no.25.22.03 (3) (i) & (ii), the Council noted that no actions were taken by the Dean, FoS, henceforth, the said item is cancelled. The Dean, FoS directed to put-up fresh proposals for approval.
- (c) Under agenda item no.25.22.05, Dr. Nirav Bhatt has briefed the information about the CHARUSAT Credit Transfer Policy. CHARUSAT credit transfer policy was proposed and presented in the 25<sup>th</sup> and 26<sup>th</sup> academic councils. Amendments to the credit transfer policy have been done and the updated credit transfer policy is attached herewith as **Annexure-M1 (Page nos.13-33)** for your reference.

Key highlights of the amendments are as under:

- (i) The candidates who opt for the MOOC for credit transfer, their final marks/percentage from MOOC will be mapped with the CHARUSAT defined grade system for respective programs. However, "DD" grades will be altered in such cases, considering 40% as passing marks in the SWAYAM courses.
- (ii) If a candidate opts for MOOC in the even semester and fails in MOOC exam, a CHARUSAT supplementary exam will be conducted by the Mentor of the course, considering the attached guideline on credit transfer published by SWAYAM-NPTEL [attached herewith for reference], under the option-3 at page number 6 and 7:
  - "college or university themselves can conduct the final exam and award the credits (In this case, NPTEL will not give the e-certificate, and question papers will have to be handled by the University themselves based on the content and assignments which will be accessible to them)". [PDF of the rule is attached herewith for reference].

*Please note that in such cases highest grade that the student will secure will be "DD", regardless of CHARUSAT defined Marks-Credit mapping.*
- (iii) The syllabus booklet of the department/institute should have a detailed syllabus of selected/offered courses from MOOC as a separate annexure, at the end of the syllabus booklet [Sample copy of the syllabus is attached for reference as per content form SWAYAM.
- (iv) The BOS approved courses from the SWAYAM will have the following pattern for course-id into the E-governance system.

Pattern: OC IT 1 001 [For Ex: first year IT program offered **OCIT1001**]



Open course	Program-year	Sr. No.
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The Council **resolved** and directed to all the Deans/ Principals:

- (i) to consider and discuss the Charusat Credit Transfer Policy in their respective Board of Studies (if not considered yet);
- (ii) to submit the Charusat proposed model (flow) of execution of the credit transfer to the Charusat Exam section and possible changes to be implemented in E-Governance system;
- (d) The action taken report of the other items of 25<sup>th</sup> Academic Council Meeting was noted and approved.

**Agenda No.26.23.03: For discussion and approval:** Minutes of Faculty Boards & Board of Studies:

**Proceedings No.26.23.03:** The agenda was transacted by respective Deans /Principals as under:

**(1) Faculty of Technology and Engineering:**

**Proceedings No.26.23.03 (1):**

The Dean, Faculty of Technology and Engineering was requested to give brief information of the minutes of 19th Meeting of the Faculty Board, Faculty of Technology & Engineering (FTE) was held on Saturday, 8th April, 2023. The salient features of the meeting shared by the Dean are:

- i. Teaching and examination schemes, detailed syllabi of B. Tech., M. Tech. programs for the batches admitted in 2020-21, 2021-22, 2022-23 and 2023-24;
- ii. Teaching and examination scheme of B. Tech 1<sup>st</sup> year program with CBCS for 2023-24 admission batch. Faculty board suggested to reflect the pass/fail students in the transcript for the audit course;
- iii. Pedagogical interventions incorporation in the course syllabi and strategy to align the teaching-learning processes to OBE;
- iv. Certificate course in Machine Learning for internal and external students towards the NEP;
- v. Teaching-learning schemes of B. Tech in Electronics and Communication Engineering with minor specializations in Data Science applicable from 2023-24. The minor specialization can be offered to other disciplines of Engineering.

**List of courses for minor specialization in Data Science**

Sr. No.	Courses	Semester	Credit
1	Mathematics for Data Science	4	5
2	Python for Data science	5	5
3	Applied Machine Learning and Deep Learning	6	4
4	Exploratory Data Analysis	7	4
		Total	18

**Resolution No.26.23.03 (1):**

The minutes of 19th Faculty Board of Faculty of Technology & Engineering (FTE) held on Saturday, 8th April, 2023 were approved by the Academic Council.

**(2) Faculty of Pharmacy:**

**Proceedings No.26.23.03 (2):**

The Dean, Faculty of Pharmacy, was requested to give brief information of the 30<sup>th</sup> Faculty Board of Pharmacy held on Saturday, 8<sup>th</sup> April 2023. The Dean of FPH presented a summary of the minutes of the Faculty Board.

The salient features of the meeting shared by the Dean are:

- i. Recommend the teaching scheme, syllabi and evaluation for the certificate course to be offered by Faculty of Pharmacy (a) Quality by Design Approach in Pharmaceutical Industry: From Basic to Applications under the Department of Pharmaceutics; (b) Clinical trial operation under the Department of Pharmacology and Pharmacy practice;
- ii. Pedagogical interventions incorporated in the syllabi and strategy alignment of the teaching-learning processes to outcome-based education;
- iii. Extra credit policy for B.Pharm. and M. Pharm programs.

**Resolution No.26.23.03 (2):**

- (a) The Council informed to put outcomes in the result analysis and placement data of faculty board minutes presentation;
- (b) The Council directed to put the modification in the Credit Transfer policy on hold for B. Pharm program and asked Dean to discuss it amongst BoS-FB members and represent revised Credit Transfer Policy for B. Pharm. program in the next Academic Council.
- (c) The council approved the Credit Transfer policy for all M. Pharm Programs.
- (d) The minutes of 30<sup>th</sup> Faculty Board of Pharmacy held on Saturday, 8<sup>th</sup> April 2023, were approved by the Academic Council.

**(3) Faculty of Medical Science**

**Proceedings No.26.23.03 (3):**

On behalf of the Dean, Faculty of Medical Sciences, the Principal of ARIP was requested to give brief information of the 7<sup>th</sup> Faculty Board of Medical Sciences held on Tuesday, 11<sup>th</sup> April 2023. The Principal of ARIP presented summary of the minutes of Faculty Board. The salient features of the meeting shared by the Principal, ARIP are:

- i. Implementation of the outcome based education from the academic year 2023-24 for BPT-MPT programs;
- ii. Changes in the Ph.D. Coursework teaching methodology as per CHARUSAT guidelines;

**Resolution No.26.23.03 (3):**

- (a) The Council directed Dr. Ritesh Patel, HoD-CE and Dr. Amit Thakkar, HoD, CSE to create a monthly patients' data bank delineated by cadre from various physiotherapy service extension centers and assigned an individual to carry out the task.
- (b) The Council approved the minutes of 7<sup>th</sup> Faculty Board of Medical Sciences held on Tuesday, 11<sup>th</sup> April 2023.

**(4) Faculty of Computer Science and Applications**

**Proceedings No.26.23.03 (4):**

The Dean, Faculty of Computer Science and Applications was requested to give brief information of the 23<sup>rd</sup> Joint meeting of the Board of Studies and Faculty Board of Computer Science and Applications held on 11<sup>th</sup> March, 2023. The Dean of FCA presented summary of the minutes of Faculty Board. The salient features of the meeting shared by the Dean are:

- i. Feedback of course teacher of 1<sup>st</sup> Semester courses of all branches of (BCA, B.Sc. IT, MCA, M.Sc. IT) as per new syllabus;
- ii. Revised syllabi of university elective UG and PG courses - focus on course contents and related materials if planning for online BCA and B. Sc. IT programs;
- iii. Syllabi of two online certification courses i.e. Digital marketing and Fundamental courses of computer applications planned to offer from July 2023.

**Resolution No.26.23.03 (4):**

The Council approved the Faculty Board minutes of the 23<sup>rd</sup> Joint meeting of the Board of Studies and Faculty Board of Computer Science and Applications held on 11<sup>th</sup> March, 2023.

**(5) Faculty of Management Studies**

**Proceedings No.26.23.03 (5):**

The Dean, Faculty of Management Studies was requested to give brief information of the Faculty Board for Management Studies held on 24<sup>th</sup> April, 2023. The Dean of FMS presented summary of the minutes of Faculty Board. The salient features of the meeting shared by the Dean are:

- i. Course curriculum for MBA and BBA program for Semester 3 & 4 applicable from the AY 2023-24;
- ii. Online Short Term Certificate course in Analytics from upGrad Campus for MBA second year students;
- iii. Foundation courses - (a) Foundation Course in Mathematics and Physics (FS101D) (b) Foundation Course in Chemistry and Biology (FS102D) to be offered as audit courses from academic year 2023-24;
- iv. Revision in syllabi for Finance Management (Introduced as a specialization specific course for Ph.D. candidates;

**Resolution No.26.23.03 (5):**

- (i) The Council has declined the proposal of Agenda Item No. B3, "Foundation Courses (Foundation course in Mathematics and Physics FS101D and Foundation course in Chemistry and Biology FS102D)" to be offered as audit courses for the Academic Year 2023-24, according to Resolution No. 26.23.06 which stipulate that Foundation Courses shall only be limited to the Faculty of Technology and Engineering and no longer open to other Faculties.
- (ii) The Council approved the other items of the minutes of Faculty Board for Management Studies held on 24<sup>th</sup> April, 2023 except agenda item no.B3.

**(6) Faculty of Humanities**

**Proceedings No.26.23.03 (6):**

Dean, Faculty of Humanities was requested to give brief information of the 1<sup>st</sup> joint meeting of ad-hoc Board of Studies and Faculty Board of Faculty of Humanities held on 20<sup>th</sup> April, 2023. The Dean of FoH presented summary of the minutes of Faculty Board. The salient features of the meeting shared by the Dean are:

- i. Transfer the courses offered to the UG and PG programs by Humanities and social sciences under the Faculty of Management Studies to Faculty of Humanities from Academic year 2023-24;
- ii. Transfer of the Ph. D. (English/ Communication) program previously offered under the Faculty of Management Studies to Faculty of Humanities from the Academic year 2023-24;
- iii. Offering certificate courses in Foreign languages;
- iv. Coaching of IELTS, TOEFL and GRE;
- v. Offering certificate courses in English, Communication and Soft skills in Academic writing for ESL learners, Pronunciation essentials for effective communication, Mastering non-verbal communication, Creative writing, Essential skills for career success, Introduction to public speaking;
- vi. Offering certificate course in Liberal arts;
- vii. Offering Hobby classes in the areas of dance, drama, singing, painting, self-defense, reading;
- viii. Inclusion of Charusat Rural Education Development program (CREDP) under Faculty of Humanities.

**Resolution No.26.23.03 (6)**

- (a) Dr. Mukesh Patel suggested that disciplinary areas in each department and subject should take a constructive approach to developing online courses by identifying an individual responsible for exploring the possibilities. He proposed considering stand-alone courses that are degree programs, either partially online/offline or completely online.
- (b) Dr. Mukesh Patel also proposed initiating the search for sources of online courses that could facilitate course content.
- (c) The Council approved the minutes of 1<sup>st</sup> joint meeting of ad-hoc Board of Studies and Faculty Board of Faculty of Humanities held on 20<sup>th</sup> April, 2023.

**(7) Faculty of Science**

**Proceedings No.26.23.03 (7):**

On behalf of the Dean, Faculty of Science, the Principal of P.D. Patel Institute of Applied Science was requested to give brief information of the 24<sup>th</sup> Faculty Board in Science held on 21<sup>st</sup> April, 2023. The Principal of PDPIAS presented summary of the minutes of Faculty Board. The salient features of the meeting shared by the Dean are:



i. Under the Department of Chemical Science

- Revision of course structure (Semester III & IV), teaching and examination scheme (elaboration / course codes) and Introduction of new courses (Semester III & IV) applicable from Academic year 2023-24;
- Newly adopted OBE formats by University with inclusion of program objective (PO), Program specific Objective (PSO)/ Program Educational Objectives (PEO), Course Objective (CO), Outcome Based Education (OBE);

ii. Under the Department of Physical Science

- Proposed new program to be offered as M. Sc. Physics with Research from Academic Year 2023-24;
- 1<sup>st</sup> year teaching and examination scheme and syllabi;
- Teaching and examination scheme and syllabi for 3<sup>rd</sup> & 4<sup>th</sup> Semester of M. Sc. Physics applicable in Academic year 2022-23;
- New format of syllabi adopted by the University with the inclusion of Outcome Based Education OBE;

iii. Under the Department of Biological Science

- NEP aligned revision in the curriculum structure, teaching and examination scheme as well as new syllabi of B. Sc. And M. Sc. in Biotechnology, Biochemistry and Microbiology implemented from AY 2023-24;
- Course wise detailed syllabi for 3<sup>rd</sup> & 4<sup>th</sup> Semester B.Sc. and M. Sc. programs (Biotechnology / Microbiology/ Biochemistry) in line with OBE guidelines;
- Development of industry-assisted courses for 4<sup>th</sup> Semester of M.Sc. programs (2 credit electives, in workshop mode);

iv. Under the Department of Mathematical Science

- Revision of teaching and examination scheme and syllabi for 1<sup>st</sup> & 2<sup>nd</sup> Semester of M Sc. Mathematics from academic year 2023-24;
- Newly adopted OBE formats by University with inclusion of program objective (PO), Program specific Objective (PSO)/ Program Educational Objectives (PEO), Course Objective (CO), Outcome Based Education (OBE);

**Resolution No.26.23.03 (7):**

- (a) The Council informed to the Dean, FoS to stick to the Academic Council resolutions and compile the documents for approval.
- (b) The Council approved the minutes of 24<sup>th</sup> Faculty Board of Science held on 21<sup>st</sup> April, 2023.

**General Resolution 26.23.03:**

- (a) Dr. Mukesh Patel suggested to the Council that all departments to have repository of the courses in order that duplication can be prevented.
- (b) The Council directed that all the courses must be uniform across the University and that students be able to register for different courses.
- (c) The Council informed that specific subject/ faculty based courses can be tailored but it is still more efficient to have them all under one roof.
- (d) The Chairman asked Dean to write the outcome after the resolutions in the Faculty Board minutes.
- (e) The Chairman informed the members that failing to take appropriate action in accordance with the previous Academic Council's decisions will result in the cancellation of the agenda item.
- (f) The Council instructed the Deans/Principals to evaluate the feasibility of the proposals and submit them to the University according to the guidelines.

**Agenda No.26.23.04:** For information and approval: Establishment of CHARUSAT Centre for Online Education (CCOE) and new Under Graduate online programs are to be offered under CHARUSAT Centre for Online Education (CCOE) from Academic Session 2023-24.

**Proceeding & Resolution No.26.23.04:**

- (a) As per CHARUSAT Act- Chapter-II (A.4) established under the Gujarat Private Universities Act 2009 (Act 8 of 2009), CHARUSAT Centre for Online Education (CCOE) has been established.
- (b) As per the BoM meeting held on 25-03-2023, management requested to start two new Under Graduate online programs under CHARUSAT Centre for Online Education (CCOE) from 2023-24 academic session.

Sr.No.	Online mode program	Program level	Duration
1.	Bachelor of Business Administration	UG	3 years
2.	Bachelor of Computer Applications	UG	3 years

The Council approved the New Programs, Program Project Report (PPR), and E-Learning Materials (ELM) of the above online programs to be offered from Academic Session 2023-24 onwards under the CHARUSAT Centre for Online Education (CCOE).

These programs shall be proposed to the University Grant Commission, Distance Education Bureau for further approval.

**Agenda No.26.23.05:** For information and approval: Merit based Charusat Scholarship Scheme for Charusat Students for Academic year 2023-24.

**Proceeding & Resolution No.26.23.05:**

- (a) The Registrar briefed the information about the Merit based Charusat Scholarship Scheme for Charusat students for the year 2023-24. The revised merit based Charusat Scholarship for Charusat students under Faculty of Technology and Engineering (CSPUT & DEPSTAR) is attached herewith as ***Annexure-M2 (Page Nos.33)***. The Council approved the list of the Merit based Charusat Scholarship Scheme.

**Agenda No.26.23.06: For information:** Foundation Courses in Engineering as audit course on platform of SARAS 3D "Genius 3D Home Standard Learning" from the academic year 2023-24.

**Proceeding & Resolution No.26.23.06:**

The Registrar shared the information on the foundation courses in Engineering as audit course on SARAS 3D platform from Academic Year 2023-24. It is hereby resolved that previously offered foundation courses shall now be limited to the Faculty of Technology and Engineering, and no longer offered by other faculties.

**Agenda No.26.23.07: For information and approval:** To approve the programs under Faculty of Humanities.

**Proceeding & Resolution No.26.23.07:**

The Registrar informed that this agenda has already discussed under the Ad hoc Faculty Board of Faculty of Humanities in this meeting. The Council approved the following programs under the Faculty of Humanities.

1. Certificate course in English, Communication and Soft Skills;
2. Certificate Courses in Foreign Languages (French, German);
3. Certificate Courses in Liberal Arts (Painting, Photography, Drama, Dance);
4. Hobby Classes (Drama, Singing, Painting, Reading, Self Defense);
5. Coaching of IELTS, TOEFL and GRE

**Agenda No.26.23.08: For information and approval:** Policy for Charusat Discipline and Surveillance Committee

**Proceeding & Resolution No.26.23.08:**

The Registrar shared the information about the Policy for Charusat Discipline and Surveillance Committee. All faculty members and employees are directed that they must strictly adhere to the guidelines set forth. A vigilance committee will be formed by the University to ensure compliance with these measures.

**Agenda No.26.23.09: For information and approval:** Research related matters:

**Proceeding No.26.23.09:**

The Dean, Research has briefed about the research outcomes and ongoing efforts to improve the research activities at Campus. He shared the existed research fellowship available at the University. He proposed to increase full time Senior Research Fellowship (SRF) up to Rs.25000/- per year (after 3 years) subject to fulfilment of the research criteria.

**Resolution No.26.23.09:**

- (a) The Dean Research's recommendation to increase full-time Senior Research Fellowship (SRF) to Rs.25000/- annually after three years has been approved in principle by the Council. The Dean Research was directed to submit a detailed SRF proposal for approval, and it was resolved that financial approval of SRF will be taken in the University's Finance Committee.

- (b) The Council resolved that the Seed Grant will only be sanctioned to new joining employees and, at the end of the year, if it is discovered that 90% of the grant was not utilized, it will be withdrawn and the project will be terminated.

**Agenda No. 26.23.10:** Any other matter with the permission of the Chair.

**Proceeding Resolution No.26.23.10:**

The registrar with the permission of the Chair briefed the following agenda items.

- (1) The minutes of the 20<sup>th</sup> Examination Reforms Committee of Charusat held on Monday, 8<sup>th</sup> May 2023. Dr. Abhilash Shukla briefed the salient features of the meeting as under.
- Approval of minutes of 19<sup>th</sup> Examination Reforms committee held on 23 September 2022;
  - Approval of action taken on the minutes of 19<sup>th</sup> Examination Reforms committee;
  - Providing digitally signed e-transcript to the present students of 1-7 semesters;
  - Providing a new grade card with new design and more security features from AY 2023-24;
  - Review the revision of remuneration of examination related duty;
  - Guidelines of Academic Prize Awards to the students at annual functions;
  - Approval of establishment of an examination center and evaluation criteria for online programs (B.B.A. and B.C.A) be offered from July 2023;

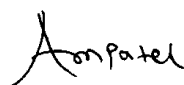
**Resolution No.26.23.10 (1):**

- (a) The National Credit Framework policy must be implemented without exception. All Deans/Principals are instructed to read and understand it thoroughly. The syllabus should clearly outline the number of class hours expected over the course of a year, with a minimum requirement of 1200 hours per year and 30 hours per credit for compulsory theory.
- (b) The Council approved the minutes of the 20<sup>th</sup> Examination Reforms Committee of Charusat held on Monday, 8<sup>th</sup> May 2023.
- (2) The Registrar briefed the information for NIOS Student Admission at Charusat

**Resolution No.26.23.10 (2):**

The Council resolved that NIOS (National Institute of Open Schooling) students will be allowed to enroll in UG programs at CHARUSAT constituent institutions for the academic year 2023-24 following verification of 12th standard mark sheet, relevant documents and a signed affidavit on 100 rupee stamp paper (or one signed by their heirs if the student is a minor).

As there was no other item/s the meeting ended with a vote of thanks to the Chair.



**Dr. Atul Patel**  
Registrar

**Date : 24-06-2023**



**CHARUSAT**  
CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY

## **Process for Credit Transfer of SWAYAM MOOC against Elective (Program/University) Courses**

1. This guideline is prepared as per UGC (Credit Framework for Online Learning Courses through SWAYAM) Regulation 2016 dated July 19, 2016 and *Academic Council Meeting Agenda 25.22.05 conducted on 16/12/2022*.
2. Board of Studies (BoS) shall approve the program-wise lists of around 5 to 15 (as per suitability) SWAYAM courses. The courses shall be offered against elective (Program/University) Courses. The list is to be updated every semester as per the availability of courses offered by Approved MOOC Providers.
3. Students shall be allowed to earn maximum 20 percent of their total program credits by attending equivalent online courses through SWAYAM.
4. The SWAYAM courses shall be of advanced or recent topics. They should not have similar or equivalent contents with other courses offered by the institution.
5. UG/PG/Ph.D. Students can register and give exam for the SWAYAM courses from 1<sup>st</sup> year onwards.
6. The registration of SWAYAM courses shall be approved and monitored through Mentor of the course.
7. SWAYAM/NPTEL/Approved MOOC Provider Certifications of an 4 weeks course shall be considered equivalent to a 1 credit, 8 weeks course considered equivalent to 2 credits, 12 weeks course considered equivalent to 3 or 4 credits.
8. In case the MOOC platform doesn't conduct proctored exam, department/institute to which such MOOC belongs will conduct exam and submit the marks to the exam section.
9. If a candidate opts for MOOC in the even semester and fails in MOOC exam, a CHARUSAT supplementary exam will be conducted by the Mentor of the course, considering the guideline on credit transfer published by SWAYAM-NPTEL, under the option-3 at page number 6 and 7:

"college or university themselves can conduct the final exam and award the credits (In this case, NPTEL will not give the e-certificate, and question papers will have to be handled by the University themselves based on the content and assignments which will be accessible to them)".

Please note that in such cases highest grade that the student will secure will be "DD", regardless of CHARUSAT defined Marks-Credit mapping.

10. The syllabus booklet of the department/institute should have a detailed syllabus of selected/offered courses from MOOC as a separate annexure, at the end of the syllabus booklet.
11. The candidates who opt for the MOOC for credit transfer, final marks/percentage from MOOC will be mapped with CHARUSAT defined grade system for respective programs. However, "DD" grades will be altered in such cases, considering 40% as passing marks in the SWAYAM courses.
12. The BOS approved courses from the SWAYAM will have the following pattern for course-id into the e-Governance system.

Pattern: **OC** **IT 1** **001** [For Ex: first year IT program offered OCIT1001]

Open course	Program-year	Sr. No.
-------------	--------------	---------

13. Swayam exam registration fee for the student will be reimbursed by the University. Student has to submit the exam registration fee receipt to Mentor for the same.

❖ **Role of Actors involved in the credit transfer process:**

The following actors are involved in the credit transfer of courses from SWAYAM. The following section represent their roles and responsibility in credit transfer process.

➤ **Role of the SPOC - SWAYAM Local Chapter:**

- SPOC has to enter the mentor details provided by department/institute SWAYAM coordinator on to the SWAYAM platform.
- SPOC has to ensure the passing of necessary information/updates from SWAYAM platform to candidates/mentors. [for ex: change in the exam date, exam center etc..]

➤ **Role of the HOD/HOI/Chairman BOS:**

- HOD/HOI/Chairman BOS has to identify the courses from SWAYAM platform that is to be offered against University course before the semester starts (Nov/June).
- HOD/HOI/Chairman BOS has to ensure the entry of the selected SWAYAM courses in E-Governance before the semester starts.
- HOD/HOI/Chairman BOS has to identify the faculty mentor and provide it to department/institute SWAYAM coordinator.
- HOD/HOI has to assign the paper setter and examiner duty (for CHARUSAT supplementary exam) to mentor in case, if student fails in SWAYAM course at the end of odd semester.

➤ **Role of the Mentor involved in SWAYAM courses:**

- Mentor has to enrol the course with CHARUSAT email-id before the course starts.
- Mentor has to track the following deadline of students:
  - Student enrolment deadline of SWAYAM course.
  - Student assignment deadline on weekly basis.
  - Student exam registration deadline of SWAYAM course.
- Mentor has to help the student for reimbursement of SWAYAM course registration fee on receiving the exam registration fee receipt from student.
- Mentor has to conduct the CHARUSAT supplementary exam in case if student fails in online course in his/her even semester, considering syllabus of online course.
- Mentor has to ensure the equivalence of supplementary exam with the exam conducted by SWAYAM.



➤ **Role of the Student Involved in SWAYAM courses:**

- Student has to enrol the course with CHARUSAT email-id on SWAYAM platform before the course starts.
- Student has to do course registration of the same course in CHARUSAT E-Governance system.
- Student has to select the mentor on SWAYAM platform before the deadline.
- Student has to submit all the assignments on SWAYAM platform before the deadline.
- Student has to do registration of the final exam on SWAYAM platform before the deadline.
- Student has to submit photocopy of completion certificate(result) showing marks obtained in MOOC to mentor as soon as result is announced.

❖ **Enrolment process into SWAYAM to be followed by Student/Mentor:**

- **Following details must be provided while enrolling the course on SWAYAM platform by Student/Mentor:**
  - Student/Mentor has to enrol the course by CHARUSAT email-id only.
  - Student/Mentor has to provide their own "Academic Bank of Credits (ABC)" during enrolment.
  - Student/Mentor has to select "YES" for the following question during enrolment:  
"Is your college Part of a SWAYAM local chapter?"
  - Student/Mentor has to select College/School Name as "Charotar University of Science And Technology" from a given dropdown list.

❖ **Registration process to be followed by Student:**

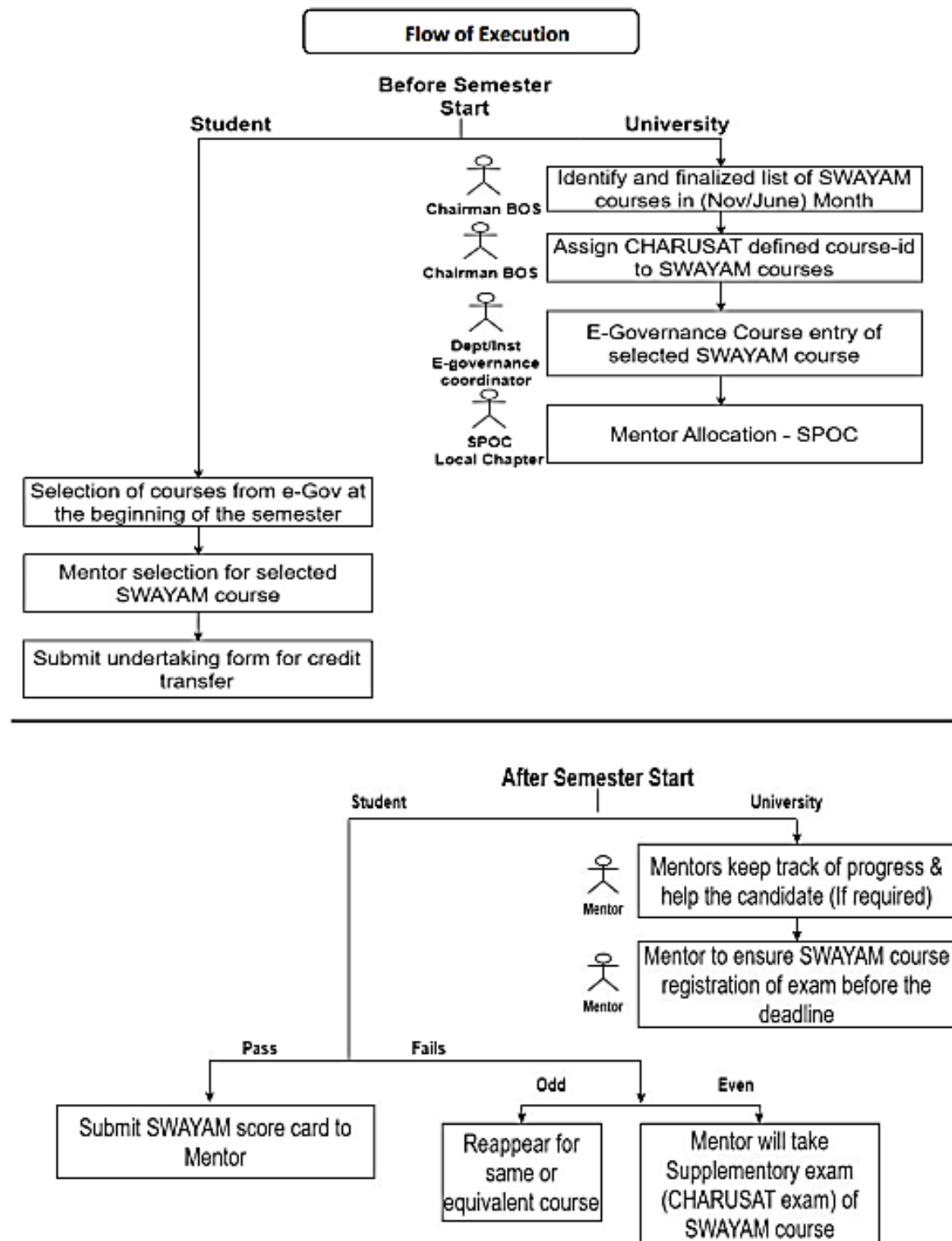
- Student must have to provide following information during exam registration on SWAYAM platform:

Local Chapter id: 304

Your College Name: **CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY**

I hereby agree to share my exam score and certificate with my college: **YES**





# CREDIT TRANSFER FROM SWAYAM-NPTEL



RECOMMENDATIONS FOR  
UNIVERSITIES TO IMPLEMENT CREDIT TRANSFER  
FROM **SWAYAM NPTEL MOOCS**



**NPTEL**, 3RD FLOOR, IC&SR BUILDING, IIT MADRAS, CHENNAI 600 036

*Credit transfer from SWAYAM-NPTEL - This is a Reference document. These are suggestions put forth by NPTEL. It is up to the College/University to implement these in their curriculum in ways they deem fit.*

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## Credit transfer from SWAYAM- NPTEL courses

NPTEL is a project of 7 older IITs and IISc. Today, NPTEL is a National Coordinator for Engineering courses (UG and PG) under SWAYAM, the National MOOCs portal. The USP of NPTEL courses is that they are offered by the best faculty in the IITs/IISc/IISERs/IITs in each subject. The content is very current as the faculty also carry out research in these areas.

NPTEL also offers courses in Humanities and Management subjects as the NPTEL partner institutes also have these departments.

NPTEL courses are for a duration of 4/8/12 weeks and each week has the following components:

- Video content of about 2.5 to 3.5 hrs per week
- Additional reading material - text transcripts, reference documents, journal papers
- An assignment that tests the learning of the student on the weekly content
- Discussion forum for the users to ask questions and clarify doubts that may arise - the communication channel between the Course instructor and the learners
- A live interaction session between the Instructor and the learners

The courses we offer are of UG/PG/PhD level and the guidelines given here are applicable to students of any degree programme.

## Calculating Learner Effort in SWAYAM-NPTEL MOOCs

Learner engagement per week is estimated as follows:

### Minimum effort required:

*Table 1: Calculation for minimum effort from an online course*

Watching videos	3 hrs for one time viewing	For better grasp and making notes, which the learner would normally do, maybe taken as 4-5 hours also.
Assignment solving time	1 hrs	If the assignment involves problems to be solved or coding work, the time taken may be 2.5 hours
Minimum Total effort per week	4 hrs	Counting only the video content and assignment time.

One credit is normally defined as the learning unit awarded for 15 hours of learning. Based on the above, the **minimum credits recommended is calculated as:**

*Table 2: Recommendation of minimum credits for NPTEL Online Courses*

	4 weeks course (hrs)	4 weeks course (credit)	8 weeks course (hrs)	8 weeks course (credit)	12 weeks course (hrs)	12 weeks course (credit)
Minimum credits recommended	16	1	32	2	48	3

**Possible additional effort involved:**

*Table 3: Calculation of possible additional effort from the learners in an online course*

Assignments	Additional 1 hr	When assignments are more complex and require more time for solving or are subjective assignments
Going through the text documents and additional reading material	1-2 hrs	Text transcripts are normally given along with other reference material.
Participation in discussion forum	1-2 hrs	Any course has normally anywhere between 5-10 posts everyday. Learners are encouraged to try and answer the queries raised by others if they know the answer and actively
<b>Total additional engagement possible</b>	<b>1 - 5 hrs per week</b>	<b>Counting other components of the MOOC course such as reading material and forum including additional time for assignment</b>

In view of the above table, an additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

Hence the University taking the courses for credit transfer can decide on how they calculate learner engagement and appropriately take the courses for minimum credits recommended or minimum credits+1 as suggested.



## **Steps involved in taking up an NPTEL online certification course**

### **1. Awareness of timelines related to SWAYAM-NPTEL Courses**

- a. NPTEL offers courses in two timelines - January to May and July to November every year
- b. Course list is announced 6 months ahead of course start date (in the website [npTEL.ac.in](http://npTEL.ac.in)) and enrollments are opened on the MOOCs portal [swayam.gov.in](http://swayam.gov.in)
- c. Enrollment is normally opened 2 months ahead of course start date and closes on the start date of course.

### **2. Requirements to enroll to SWAYAM- NPTEL courses**

- a. Mandatory requirements are an email id and a phone number for the learner. (This email id is unique to a learner and cannot be shared by multiple learners. It is the primary identifier to map assignment and exam scores of the learner).
- b. For some courses, the instructor would have given pre-requisites (especially if it is a higher semester course). The students have to ensure that they have the necessary prerequisites to understand the content and learn from the course, though it is not a mandatory requirement for enrollment.

### **3. Activities to be done by students once course starts**

- a. After the start date of course, every week, videos and assignments are released on Monday morning.
- b. Learner should watch the videos, go through the reading material and complete the assignment.
- c. Each assignment will have 7-10 days of submission time. For most assignments, submission can be done any number of times till the due date. The final submission is considered for evaluation and the final score is taken as the marks for the assignment.
- d. Learners should pose their queries (both related to content and process) in the discussion forum to get clarification from each other and from the course team.

### **4. Financials related to SWAYAM- NPTEL courses**

- a. Enrollment to a course and learning from it is free, as this is a project supported by MHRD, GoI.
- b. To get a certificate from SWAYAM-NPTEL, the learner has to separately register and appear in person for a proctored exam.

### **5. Logistics related to certification examination**

- a. The exam registration forms are opened almost a month before the start of the course and open till 3 weeks into the course.
- b. This exam is organized and conducted by NPTEL across 150+ cities in the country through an exam vendor.
- c. The exam dates (may be 2 or 3 days with option of multiple sessions) are given 6 months ahead along with the list of courses and corresponding exam date/session mapping information.

- d. The exam carries a fee of Rs 1000/- to cover the expenses incurred in organizing this exam.
- e. A representative from NPTEL will be present at each of the exam centres to monitor the smooth and impartial conduct of the exam.

#### **6. About the SWAYAM-NPTEL Certificate**

- a. If the learner matches the pass criteria (see the next section), he/she is eligible for the e-copy of the course certificate which displays the name, roll number, photo, assignment marks, exam marks and total marks of the candidate.
- b. The e-certificate will have the signatures of the NPTEL coordinator, the Head of the Centre for Education in the corresponding institute to which the Course instructor belongs along with the logo of the institute.
- c. The e-certificate also carries the QR code, on scanning which, the original certificate hosted on NPTEL server will be accessible. This way any one presented with the e-copy can verify against the original.
- d. Hard copies of the certificates can be printed by the learner on downloading the e-copy of the certificate.

### **Pass criteria**

The weekly assignments are all graded out of 100 marks.

For the 4/8/12 week courses, normally best 3/6/8 assignments are considered for calculating the Average assignment score (out of 100).

Final score = 25% of Average assignment score (out of 100) + 75% of proctored certification exam score (out of 100)

Learner is said to be certified in the course and he/she will be eligible for the e-certificate **IF**

Average assignment score  $\geq 40/100$

**AND**

Proctored certification exam score  $\geq 40/100$

For a few courses (particularly programming courses), this pattern of grading may be slightly different, though the broad guideline and split will be the same as above. These will be announced during the course run and when final scores are published.

### **How to choose courses for credit transfer?**

NPTEL offers a variety of courses which include core, elective and multidisciplinary courses at UG and PG level every semester. The tentative list of courses for a semester is announced 6 months ahead, along with the timelines such as start dates, end dates, exam dates and enrollment dates. Goal of NPTEL is to offer all the core and elective courses in every Engineering discipline at least once a year. Courses that may be in demand might be offered twice a year, either by the same Course instructor or by different Instructor(s).

## **Recommendations to Academic councils while approving courses**

As per the AICTE/UGC guidelines, every semester, the learner can credit courses from SWAYAM MOOCs upto 20%, which usually translates to 1 course per semester.

### **Option 1:**

NPTEL is defining domain certifications within each discipline where a certain number of allied courses are grouped together to form a domain or area of specialization. Each domain comprises 3-4 core courses that are compulsory and 2-3 elective courses to be taken from the options given. The students need to complete these domain courses within 3 years from their first exam registration to complete a domain certification. The set of 5-7 courses taken will give the student a strong foundation and understanding of the area and might make students more job ready or better prepared to pursue higher education and research.

These domains (set of courses) can be recommended and approved by the Academic council so that students can start taking these courses from the first/second year and comfortably complete it by the time they graduate.

The domain may be entered into the college transcript as such and given additional credits. It is suggested that this not be made mandatory for all students but for only those who want specializations (like a Minor) along with their regular degree.

### **Option 2:**

Universities such as AKTU and MAKAUT have suggested that students who accrue 20 credits from NPTEL in addition to their regular coursework will be awarded BTech with Honors degree. Students have to take the courses and write the NPTEL exams and show the certificates obtained.

Advantages are that the regular course offered can be taken from the college during the normal schedule and the 20 credits can be pursued by the more dedicated group of students in each programme. And the suggestion for the 20 credits can be completing one of the domains or defining a set of courses, which would really help the student.

### **Option 3:**

All students should be mandated to take at least 1 or 2 courses online with NPTEL every year to be better prepared for the future so that they can cultivate the habit of self-study online. But this should be under the general/open elective category so that it does not hamper their graduation in case they do not do well in the course.

While the enrollment and learning can be with NPTEL, the final exam can be

- from NPTEL (which is again recommended so that students get a taste of the final evaluation and also get a certificate from IITs/IISc)



- or the college or university themselves can conduct the final exam and award the credits (In this case, NPTEL will not give the e-certificate and question papers will have to be handled by the University themselves based on the content and assignments which will be accessible to them).

It is again recommended that the courses taken by the students be a discipline elective not offered by the college - so that they can leverage the online course initiative completely - which is to facilitate opportunities in areas of learning for which faculty are not locally available.

#### Option 4:

Students can enroll in courses aligned with a course offered in-campus, and do the NPTEL assignments/exams which can count towards the internal marks for the in-campus course rather than for full credits from the NPTEL course alone. This will enable SWAYAM-NPTEL MOOCs to count towards partial credits for the course.

### How SWAYAM- NPTEL MOOCs differ from other e-learning portals such as edX and Coursera

1. **Courses** offered by NPTEL are largely based on AICTE curriculum and bring together the best content for the topics mentioned. Courses under NPTEL are offered by faculty, from top ranked institutions such as the IITs/IISc/IIIT/IISER/CMI etc., who are researching in topics taught and also teach it regularly within their institutes.
2. **Instructors** being from India know the background of the students and the Indian schooling system and hence the content is taught keeping this in mind. They also teach with examples that are taken from the Indian context.
3. **Final in-person proctored exam:** None of the other MOOC portals conduct a proctored examination where the student credentials are verified and the exam has to be attended in person, not online or from anywhere. This is the biggest USP we see of NPTEL courses vs other providers. Many give out certificates just for a price, sometimes without even a final exam.
4. **Assignments:** Courses in many MOOC portals carry the same assignments for long periods of time, even a year, and many of these can be easily manipulated to get the right answers and full marks. In NPTEL, every time the course is offered, new assignments and final question papers are prepared by the instructors with minimal repetition.
5. **Verification of e-certificate:** The e-certificate has a QR code that can be scanned and verified from the NPTEL servers.
6. **Local Chapter:** NPTEL works closely with colleges and Universities in India through its Local Chapter programme. There is an NPTEL coordinator in every local chapter college and this person has access to all information such as course wise participant enrollment, exam registration details, hall tickets, final exam marks and e-certificates - of learners who have declared as belonging to that college. These coordinators have direct access to support teams at NPTEL to get any issues resolved with respect to courses/exams. NPTEL works

with the colleges closely getting feedback and makes changes to the learning process to make the MOOCs adoption more effective, ensuring maximum benefit for the learners.

## **How to approve courses in Academic Council for better implementation**

The following are the recommendations by NPTEL when approving courses for credit transfer:

1. The statistics of all the courses offered so far (1300 till June 2019) is available on [nptel.ac.in/noc](http://nptel.ac.in/noc) and the content (videos+assignments) is available on [nptel.ac.in](http://nptel.ac.in). It is suggested that before the Academic council identifies the courses, a few faculty members in every discipline go through this data and shortlist those which would be most suited for their students and also benefit them as per the local needs.
2. Preferable to approve generic bouquet of course titles, not mentioning the instructor and institute, which will allow for flexibility to take similar courses from any institute. This can be done at the program level such as for BE(CS), BE(EEE), etc.
  - a. For instance, the recommendation "Students have to take 3 courses offered under the Electrical Engineering Discipline by NPTEL having 60% or more overlap with curriculum provided by University for the courses: DC - Electrical Machines, AC-Electrical Machines and Power Electronics" is a better one compared to "Students have to select the course 'Electrical Machines-I', 'Electrical Machines-II', and 'Power Electronic Devices' from NPTEL".
  - b. It would be good to recommend discipline-based courses in this bouquet so that students are encouraged to study technical content from NPTEL.
  - c. The course titles recommended may not match verbatim with the title given by the NPTEL course and the college should have some flexibility in deciding the appropriate course and mapping it to a curriculum requirement.
3. If more specifics are required, for every year of the degree programme, again a set of courses may be approved to be taken or can be more generic as any 8/12-week courses in a certain discipline. This provides the needed flexibility as NPTEL re-offers courses based on Instructor consent and how well the course did in the last offering.
  - a. For instance, a recommendation by academic council/board of studies like "Students will have to take an 8-week/12-week course from Electrical Engineering discipline" is a more focused recommendation compared to "Students will have to select any 8/12-week course from NPTEL"
  - b. We recommend that colleges be allowed to decide the specifics of the courses to be taken in a specific semester and intimate the same to the University.
4. Certain courses such as programming using Python/C/C++ and Data Analytics can be recommended to all engineering disciplines as these are technical skills that cut across engineering disciplines.
5. It is suggested that courses for credit transfer can be approved under all buckets - core courses, discipline elective, general elective and open elective.
6. Recommended semesters for taking NPTEL courses - first to pre-final semester.

The CBCS system is designed to give flexibility to students to learn based on their interest and to be able to take courses cutting across disciplines. Our recommendation would be to permit this cross-department course study as part of MOOCs adoption.

### **To be avoided - Our suggestions**

1. Recommending NPTEL courses in the final semester of the Degree programme as mandatory upon which the graduation depends
  - a. Preferable to not do this as NPTEL results may not come in the timeframe the University requires results to be approved for graduation.
  - b. Also, if the student does not pass the course, NPTEL does not conduct supplementary exams for the courses and unless the University has a mechanism in place to handle this, it is suggested to not do so.
2. Recommending NPTEL Courses for first semester
  - a. Many learners might not be familiar with the NPTEL Course schedules and the SWAYAM platform and will take some more time to get used to it.
  - b. The learners also need to be familiar with University processes for Credit Transfer and the first semester requires them to go through a steep learning curve already with the regular teaching-learning load.
3. Naming specific courses with instructor and institute name for students of a semester and approving for a period of 3 years
  - a. NPTEL may not be re-offering the course in upcoming semesters whereby if made mandatory, this requirement cannot be fulfilled by the student.
  - b. There may not be an alternative course to this from another institute as the timelines may not match for the new instructor.
4. Ambiguous and broad recommendations
  - a. For instance, the recommendation "Students can take 20% of credit every semester from NPTEL courses"
5. Not providing alternative mechanisms to complete the credit in case of non-registration or unsuccessful attempt by the student.
  - a. For instance, a recommendation like "The credit will come only if a student passes the NPTEL exam in the same semester" should be avoided.

### **Incorporating NPTEL course marks into the University grading system**

NPTEL will share

- the actual marks scored by each student in every assignment submitted,
- the marks scored in the final certification exam,
- the final consolidated score as per NPTEL calculation,
- and the e-certificate if the learner has passed (which will also have the total number of learners who have qualified in the exam).



The university/college can use this information and convert it into their system of grades as per their requirement:

1. Some colleges use the NPTEL scores as is, and the same marks are indicated on the transcripts directly.
2. Some colleges do a relative grading of their student marks with respect to the highest marks in the course and scale up correspondingly the marks of their students and this scaled up marks is what is finally entered into the degree transcript.
3. The marks given can be translated into letter grades also according to their mapping system or after scaling it up.
4. The cutoff for pass/fails in a course can be decided by the university/college if required, though the actual marks as given by NPTEL is what will always be stored and saved in the NPTEL server.

The results of NPTEL exams are typically released within one month of completion of exams, i.e. by May end for the Jan-May offering and November end for the Jul-Nov offering. However, this time may get delayed by couple of weeks for exams that have subjective evaluations specified by the instructor. The University should provide sufficient time window for its students to submit the NPTEL e-certificates for Credit Transfer (typically 2-3 months after NPTEL releases its result).

### **Providing allowance for NPTEL Exam fees within existing payment structure**

- While the course is free to enroll, the fees for the final certification exam is Rs 1000/- per course to cover the costs of conducting the exam across India in more than 150 cities in a uniform and dependable manner with appropriate exam facilities, and invigilation.
- A common issue that arises is that students have already paid the fees for the courses of each semester to the institution.
- A suggestion is for the institute to pay for the exam completely or at least half the fee, the other half being borne by the student.

### **Use of SWAYAM-NPTEL courses for faculty members:**

NPTEL has an MOU with AICTE to have specific courses approved as FDP and contribute towards career progression points for the faculty. The modality is for faculty to enroll to these courses, write the exams and pass and then apply for the AICTE-NPTEL FDP certificate.

We have seen a large number of faculty enroll and learn from the courses on their own and also institutes encouraging them to do so. We recommend that institutes ask faculty members to complete at least one NPTEL course every semester, within their discipline or any other discipline. This will ensure continuous learning and updating of technical concepts, get an insight into the pedagogy of teaching the course, ideas on different types of assessment of the student, etc.

NPTEL also has courses on technology in education, teaching using learner-centric methods, on IP, Patent laws, Education system, etc. These can be recommended for new faculty recruits so that they understand the system.

## Local Chapters

NPTEL is partnering with more than 2700 colleges across the country today, which include engineering, arts/science, polytechnic, management, pharmacy colleges and working with them in an organized manner to take the online courses to the learners there. There are no financials involved, with the only requirement being that a person be identified, who can serve as an interface between the college and NPTEL, and who is designated as the Single Point of Contact (SPOC).

The SPOC gets direct access to

- Enrollment information course wise
- Exam registration details
- Hall tickets of learners from their college
- Assignment and exam marks of candidates from their college
- E-certificates

The above information is directly shared from NPTEL with the SPOC through their login and can be used towards crediting the courses as per the decided norms.

In addition, the SPOC can nominate a mentor faculty from the college to help students in better understanding the content. For this, both the mentor and mentee student need to be enrolled in the course and the students have to select the mentor from the online course portal. The mentor will be able to see the progress of the student real time and can blend face-to-face instruction to supplement the online learning. The SPOC and Mentors for specific courses can also facilitate the learning by arranging for computer time, internet facility and help in understanding the content better.

For better and effective implementation of credit transfer, it is advised that universities encourage affiliated colleges to become Local Chapters with NPTEL.

For queries, please write to:


[bharathi@nptel.iitm.ac.in](mailto:bharathi@nptel.iitm.ac.in)

[kamala@nptel.iitm.ac.in](mailto:kamala@nptel.iitm.ac.in)



## CREDIT TRANSFER FROM SWAYAM-NPTEL

**NPTEL**, 3RD FLOOR, IC&SR BUILDING,  
IIT MADRAS, CHENNAI 600 036

 **PH : (044) 2257 5905/08**

 **[swayam.gov.in/NPTEL](https://swayam.gov.in/NPTEL)**

 **[support@nptel.iitm.ac.in](mailto:support@nptel.iitm.ac.in)**

## OC2001: DATA BASE MANAGEMENT SYSTEM

### Description:

This course OC2001 – Database Management System is offered from SWAYAM as noc23\_cs41 – Data Base Management System.

### Credit and Week:

Teaching Scheme	Week	Marks	Credit
	4/8/12	100	2/3/4/5

### About the course:

Databases form the backbone of all major applications today – tightly or loosely coupled, intranet or internet based, financial, social, administrative, and so on. Structured Database Management Systems (DBMS) based on relational and other models have long formed the basis for such databases. Consequently, Oracle, Microsoft SQL Server, Sybase etc. have emerged as leading commercial systems while MySQL, PostgreSQL etc. lead in open source and free domain.

While DBMS's differ in the details, they share a common set of models, design paradigms and a Structured Query Language (SQL). In this background the course examines data structures, file organizations, concepts and principles of DBMS's, data analysis, database design, data modeling, database management, data & query optimization, and database implementation. More specifically, the course introduces relational data models; entity-relationship modeling, SQL, data normalization, and database design. Further it introduces query coding practices using MySQL (or any other open system) through various assignments. Design of simple multi-tier client / server architectures based and Web-based database applications is also introduced.

### Pre-requisites:

1. Procedural and / or Object-Oriented Programming (C / C++ / Java / Python)
2. Data Structures
3. Algorithms

### Industry support:

DBMS is so fundamental that all companies dealing with systems as well as application development (including web, IoT, embedded systems, data mining, machine learning) have a need for the same. These include – Microsoft, Samsung, Xerox, Yahoo, Google, IBM, TCS, Infosys, Amazon, Flipkart, etc.

From SWAYAM website



**About the course:**

Databases form the backbone of all major applications today – tightly or loosely coupled, intranet or internet based, financial, social, administrative, and so on. Structured Database Management Systems (DBMS) based on relational and other models have long formed the basis for such databases. Consequently, Oracle, Microsoft SQL Server, Sybase etc. have emerged as leading commercial systems while MySQL, PostgreSQL etc. lead in open source and free domain.

While DBMS's differ in the details, they share a common set of models, design paradigms and a Structured Query Language (SQL). In this background the course examines data structures, file organizations, concepts and principles of DBMS's, data analysis, database design, data modeling, database management, data & query optimization, and database implementation. More specifically, the course introduces relational data models; entity-relationship modeling, SQL, data normalization, and database design. Further it introduces query coding practices using MySQL (or any other open system) through various assignments. Design of simple multi-tier client / server architectures based and Web-based database applications is also introduced.

**Pre-requisites:**

1. Procedural and / or Object-Oriented Programming (C / C++ / Java / Python)
2. Data Structures
3. Algorithms

**Industry support:**

DBMS is so fundamental that all companies dealing with systems as well as application development (including web, IoT, embedded systems, data mining, machine learning) have a need for the same. These include – Microsoft, Samsung, Xerox, Yahoo, Google, IBM, TCS, Infosys, Amazon, Flipkart, etc.



**MERIT BASED CHARUSAT SCHOLARSHIP SCHEME FOR CHARUSAT STUDENTS  
FOR ACADEMIC YEAR 2023-24**

*(The agenda page 41 of Annexure-12 is replaced with correction/s in blue font colour)*

## Faculty of Technology and Engineering (CSPIT & DEPSTAR)

(A) Undergraduate Programmes, CSPIT					Merit Scholarship 2023-24				
Sr. No.	Programmes	Duration	Intake	As per FRC	CSPIT Proposed tuition Fees		*Merit Rank 2023	* Merit Scholarship Scheme	Fees after scholarship
					MQ & State Quota (Rs.)	NRI (\$)			
1	B. Tech. (CE)	4	120	1,28,000	1,35,000	4,500	ACPC: Up to 1500 JEE: Up to 30000	100% of tuition fees as Scholarship	0.00
2	B. Tech. (IT)		120			4,000			
3	B. Tech. (CSE)		60			5,000			
4	B. Tech. (AI-ML)		60			5,000			
5	B. Tech. (EC)	4	90	1,28,000	1,00,000	ACPC: Up to 10000 JEE: Up to 40000	100% of tuition fees as Scholarship	0.00	
6	B. Tech. (ME)		60						
7	B. Tech. (CL)		60						
8	B. Tech. (EE)		30						
(A) Undergraduate Programmes, DEPSTAR					Merit Scholarship 2023-24				
Sr. No.	Programmes	Duration	Intake	As per FRC	DEPSTAR Proposed tuition Fees		Merit Rank 2023	* Merit Scholarship Scheme	Fees after scholarship
					MQ & State Quota (Rs.)	NRI (\$)			
9	B. Tech. (CSE)	4	120	98,000	1,35,000	5,000	ACPC: Up to 1500 JEE: Up to 30000	100% of tuition fees as Scholarship	0.00
10	B. Tech. (CE)		120			4,500			
11	B. Tech. (IT)		60			4,000			
*Note:	<div>1. Additionally, first three female students admitted in core branches (ME/EC/CV/EE) will be awarded 100% of tuition fees as Scholarship. <b>(On basis of First come first serve and minimum 50 percentile in HSC examination).</b></div> <div>2. The currency exchange rate will be applicable: 1 USD = 80.00 INR.</div> <div>3. <i>*First 5 candidates shall be offered merit scholarships in each branch. For EC/ ME/CL/EE, the scholarship shall be offered on first come first serve basis for above specified merit. For CE/ IT/CSE/ AI-ML, the scholarship shall be offered based on merit.</i></div> <div>4. <i>A candidate cannot avail more than one scholarship.</i></div> <div>5. <b>Scholarship continuation eligibility:</b> Students who shall clear their university examination without backlog will be awarded scholarship in subsequent years.</div>								
(B) Postgraduate Programmes, CSPIT					Merit Scholarship 2022-23				
Sr. No.	Programmes	Duration	Intake	As per FRC	CSPIT Proposed Fees	* Merit Scholarship Scheme			Fees after scholarship
1	M. Tech. (CE)	2	18	1,59,000	1,20,000	N/A			-
2	M. Tech. (AMT)		18						
3	M. Tech. (TE)		18						
4	M. Tech. (CL)		18						