4/17/2023

SEMESTER READINESS PROGRAM (SRP)

COLLEGE OF ENGINEERING - AY 2023-24

DEAN (ADDL) ACADEMICS
KONERU LAKSHMAIAH EDUCATION FOUNDATION

Contents

SRP Phases & Faculty Roles:

The following are the key roles in which faculty are involved in SRP:

- Principal, College of Engineering
- Head of the Department
- Cohort Professor Incharge
- Cohort Faculty incharge
- Course Coordinator
- Course Instructor
- Lab programmer

SRP Phases: The entire SRP is split into four phases as listed below:

SRP Phase 0 – Listing of courses to be offered, faculty allocation

SRP Phase 1 – Self-Learning phase with clear division of topics

SRP Phase 2 – Collaboration Phase with learning and lecture delivery as a group on-campus

SRP Phase 3 – Tutorial/Practical/Skill preparation phase executed in labs as a group.

SRP Timeline:

Weekly Planning	Dates for AY 2023-24
Week -11 & Week -12: SRP Phase 0 (SRP Preparation Phase)	2nd April 2023 – 15th April 2023
Week -10: SRP Phase 1 – Week 1 (Self-Learning Phase)	16th April 2023 – 22nd April 2023
Week -09: SRP Phase 2 – Week 1 (Collaboration Phase)	23rd April 2023 – 29th April 2023
Week -08: SRP Phase 2 – Week 2 (Collaboration Phase)	1st May 2023 – 6th May 2023
Week -07: SRP Phase 2 – Week 3 (Collaboration Phase)	8th May 2023 – 13th May 2023
Week -06: SRP Phase 1 – Week 2 (Self-Learning Phase)	15th May 2023 – 20th May 2023
Week -06: Summer Vacation Week 1	The vacation weeks MUST be utilised by faculty for Self-Learning as this will be an ideal time form them to innovatively think on improving the quality of course and to improve their understanding of the concepts
Week -05: Summer Vacation Week 2	
Week -04: Summer Vacation Week 3	
Week -03: SRP Phase 2 Audit commencement	5th June 2023
Week -03: SRP Phase 3 – Week 1 (Collaboration Phase)	5th June 2023 – 10th June 2023
Week -02: SRP Phase 3 – Week 2 (Lab & Skill Phase)	12th June 2023 – 17th June 2023
Week -01: SRP Phase 3 - Week 3 (Lab & Skill Phase)	19th June 2023 – 24th June 2023
Week 000: Semester Readiness Week	25th June 2023 – 1st July 2023
Week 001: Classwork Commencement for AY 2023-24 ODD SEM	3rd JULY 2023

SRP Phase 0

Phase 0 Objectives:

- Identify the total list of courses offered across College of Engineering, draw commonality among the courses to plan for multi-department offering.
- Offer choices of courses to register in every semester for all categories of courses. Provide a clear road map for CBCS for each department.
- Categorise courses into cohorts to ensure every course is offered only from one cohort.
- Take faculty preferences for courses offered across College of Engineering
- Allocate faculty teams and Course Coordinator, Operational Course Coordinator (optional) for each course.
- Share the complete data with course catalogue, faculty catalogue and course-faculty mapping document to all departments in College of Engineering.

The preparatory phase of SRP where all the courses to be offered in AY 2023-24 will be listed by the departments, verified by the office of Dean Academics against the regulations and finalised by the Principal CoE by conducting a meeting with all HoDs thus bringing together all common courses across the College of Engineering. Principal also discusses about the categorization of courses into cohorts where a cohort is a group of faculty (preferably from multiple departments) who wish to upskill themselves in a specific technology domain by teaching courses relevant to that domain. For AY 2023-24 there are 30 technology cohorts in College of Engineering which are headed by the Cohort professor Incharge and supported by the Faculty Professor Incharge and the faculty team in each cohort.

The options form is floated by the Office of Dean Academics with clear list of courses in each cohort and a provision for faculty to select the cohorts and the choose the courses that they are interested to teach in AY 2023-24. The data is then shared to principal CoE. Principal CoE to conduct a meeting with all HoDs and freeze the course allocation to all faculty in the College of Engineering with the help of the HoDs. The course coordinators MUST be identified by Principal CoE through a discussion and recommendation from HoDs. Responsibilities of a course cooridnator are mentioned in Appendix A.

Phase 0 Report Templates

The final faculty allocation and course allocation must follow the templates as shown below. The data once filled MUST be verified for duplicates, data inconsistency and must then be shared to all departments in the college of Engineering. The CBCS template for each batch of students MUST also be submitted with clear choices provided for students in the even and odd sem in each academic year.

COURSE CATALOGUE & COURSE ALLOCATION TABLE AY 2023-24								
Sl No	Course Code	Course Title	Cohort Mapping of the course	Academic Year	Semester	Emp ID	Emp Name	Course Coordinator (Y/N)

FACULTY CATALOGUE & COURSE ALLOCATION TABLE AY 2023-24					AY 2022-23 Summer		AY 2023-24 ODD				AY 2023 – 24 EVEN			
Sl No	DEPT	Emp ID	Faculty Name	Cohort	Course 1	CC (Y/N)	Course 1	CC (Y/N)	Course 2	CC (Y/N)	Course 1	CC (Y/N)	Course 2	CC (Y/N)

Department-wise CBCS Template for II, III & IV Year Students in AY 2023-24 (ODD & EVEN)														
Course Count (C0 to C7)	Batch	DEPT	Category	ODD	Category	EVEN	CHOICE	L	T	P	S	Cr	CH	MAX CONTACT HOURS

Audit Checklist for Phase 0

Checklist:

1. Are all the allocated courses listed in the course catalogue as per the academic council approved list?
2. Is the planning done for the entire academic year including the summer semester
3. Are all courses allocated faculty as per the needed workload
   Workload for a course = (1*L+2*T+3*P+2*S) X Number of Sections
4. Are all faculty including the administrators, allocated courses
5. Is every faculty allocated courses not beyond two courses in each semester
6. Is CBCS document prepared keeping in mind choices of courses to be given to students in each semester
7. Are the common courses identified and faculty allocated from multiple departments to which the course is offered.
8. Are course coordinators identified by HoD after discussion with Principal CoE. It is important a collective decision is made in the allocation of course coordinators.
9. Was a declaration collected from Course coordinators stating that they clearly read all their responsibilities and that accept them in total.

SRP Phase 1: (Self-Learning Phase)

Phase 1 Objectives:

- To prepare through MOOCs, previously available content, FDPs, specific topics through self-learning by every faculty as distributed by the CC
- To prepare an instructional design for the allocated topics to aid in building video lectures and SLMs.
- To prepare questions, topic-wise by the faculty to use in the interactive video content.
- To prepare a question bank where questions mapped to various applicable BTLs with references made from competitive exams (both industry and higher studies)

The Cohort professor Incharge must ensure that every CC distributes the topics among the course faculty team so that each course instructor self-learns the topics, identifies the depth of delivery of the specific topic, creates an instructional design to prepare the video content and SLMs, prepares a question bank with questions developed on their own and also resourced from various competitive exams. The CC must ensure that the faculty are constantly monitored for their progress in the self-learning phase.

Phase 1 Outcomes

Template for Course - SRP Phase 1 Topic Wise Faculty Allocation:

Course Title:			LTPS:	Code:
Sl No	CO	Topic	Faculty 1	Faculty 2

SRP Phase 2 (Collaboration Phase):

Phase 2 Objectives:

- To prepare a detailed lesson plan for delivery of the course, finalise the evaluation components and complete the course handout preparation
- To deliver lectures to fellow faculty team topic-wise by each faculty member to ensure every faculty is clear about the depth of delivery and the material to be used for delivery of each topic.
- To enable the faculty to learn from the team by actively participating in SRP
- Prepare video lectures with clear instructional design and convert them into playlists and interactive video content by embedding questions into the videos.
- Mandatory for the faculty to have a project.
- Template for Course - SRP course delivery and Video lectures schedule.
- To provide list of lab experiments, skill exercise and projects to the designated labs to ensure the lab programmers prepare the labs accordingly.

In this phase, all the faculty need to concentrate on learning of the course and its delivery to the peers. part during this phase. Faculty are to prepare for the delivery of the content based on the need. PHASE 2 is an important phase where CC must play a vital role. It includes the lesson plan, preparation of course handout, concentrating on video lectures, monitoring the faculty who are not able to deliver the sessions as per the requirement. CC has to plan for the FDPs and select few sources where the faculty can get the best from the FDPs. CC need to concentrate on the International experts and industry experts who will deliver to the students during the semester.

Phase 2 Report Templates

Course Title:				LTPS:	Code:
Sl No	Faculty Emp ID, Name	CO#	Topic	Lecture Delivery Schedule	Video lectures recording schedule

Audit Checklist for phase 2

- to cross check if course handout has been prepared to the fullest as per the Course Handout checklist
- to check if appropriate and varied ALMs are included in the course handout
- to verify whether the video lectures are made with interactive content.
- to verify if all the topics to be delivered are included in the course handout.
- to check if the CC has identified any instructor is failing to delivery as per the requirement and what remedy has been taken to improve his/her teaching skills.
- Verify if any FDP has been conducted for the course.
- to check whether the faculty have completed project.
- to verify if the CC has included Advance leaners topic and peer mentors topics in course handout.
- to check whether the CC has identified the international experts and Industry experts to deliver the content to the students.
- Check if the CC has identified MOOCs courses from NPTEL, Coursera and other popular MOOCs platforms.

SRP Phase 3 (Lab & Skill Phase):

Phase 3 Objectives

- to ensure that all the faculty including the CC work on complete end-to-end execution of tutorial/skill exercise/Lab exercise.
- to encourage the faculty to actively participate in the courses which enhance their skills.
- to concentrate on the faculty who are not willing to contribute towards skill exercises.
- to ensure that all lab programmers are included in execution of the tutorial/lab/skills exercises.
- to mandate the importance of the lab programmers during lab sessions
- to maintain workbook for the lab sessions

Phase 3 concentrates on the execution of tutorial/skill exercise/Lab exercise. Lab Programmers need to be taken or given a role as it includes lab. As the lab programmers are already aware of the experiments to be enhanced during the SRP the lab would run effectively. A copy of the workbook along with solutions need to be prepared by all the faculty.

Phase 3 Report Templates

Template for Course - SRP Phase 3 Topic Wise Faculty Allocation:

Course Title:			LTPS:		Code:
Sl No	Faculty ID	Topic	Tutorial Exercises (YES/NO)	Lab Exercises (YES/NO)	Skill Exercise/Lab Exercises(YES/NO)

Audit checklist for phase 3

- To check if the CC has maintained the course file as per the check list given to the CC
- to verify whether workbook with solutions is prepared/completed/or on going.
- to check if the updated list of experiments is updated for display on the lab walls.
- to check if the lab programmers are actively involved in execution of the lab experiments.
- to check if a copy of the workbook along with solutions is available in the lab
- to submit one copy to the Principal's Office.

Semester Readiness Week:

This week, which is a just a week ahead of commencement of classwork, must be utilised to do the following tasks:

- Send welcome emails to the students taking the course and briefing them on the course objectives, key areas to focus while learning the course, the risky aspects in the course and the expectations in terms of the targets to be achieved and the outcomes to be met.
- Upload all e-learning content in LMS in an orderly format to ensure that students start preparing for the classwork. This will enable flipped learning in the course.
- Upload all the quizzes in LMS and define a flow for enabling these quizzes.
- Upload discussion forums in LMS and enable the discussion among students by initiating the conversation through a question or a topic.
- Sensitise the students on the evaluation, plagiarism policy, MOOCs policy, attendance policy and malpractice policy.

Appendix A: (Responsibilities of a Cohort Professor Incharge)

The Cohort professor Incharge will have the following responsibilities and will be duly supported by the faculty incharge:

- Maintain appropriate industry, skill, tools mapping of courses through benchmarking with industry and globally acclaimed Universities, Professional Societies and Skill Frameworks.
- Build the entire course using the templates provided for course-building by taking all stakeholders' feedback and through benchmarking done as mentioned above.
- Obtain industry vetting for all courses mapped to the cohort.
- Plan and execute FDPs for all courses mapped to the cohort.
- Execute SRP ensuring that all the objectives of SRP are fulfilled, and all faculty are ready for delivering the courses.
- Vet the course handouts, question banks/question papers, ALMs as per the timelines mentioned by office of Dean Academics.
- Vet the tutorial/lab/skill workbooks and list of projects
- Monitor the progress of Peer Mentors in courses mapped to the cohort.
- Plan and execute national and international experts' delivery of course content (both partial and complete)
- Ensure weekly course meetings for all courses in the cohort are conducted and all points relevant to quality of delivery of the courses and their assessments is discussed in detail and documented.
- Ensure the course files are accurately maintained for each course in the cohort with clear OBE analysis, interpretation of the OBE data and the corrective measures.
- Vet all the course SLMs, Video Lectures, MOOCs and ensure all these are aptly posted in LMS
- Facilitate and monitor Flipped model of delivery and conduct of ALMs for every course mapped in the cohort
- Ensure effective mapping of certified faculty for conducting value added courses to meet the objective of getting students certified in the mapped global certifications.
- Constantly monitor faculty upskilling activity to ensure there is honest and effective earning of global certifications by faculty based on the need in the Cohort.
- Verify weekly participation of faculty in global challenges and also monitor the faculty mentoring for student participation in global challenges mapped to your courses.
- Ensure effective and quality-focussed evaluation of answer scripts in both In-Sem and End-Sem for courses mapped to the cohort
- Participate in faculty recruitment and drive the system towards closing the faculty requirements gap for their respective cohorts.
- Collect sampled student feedback from courses mapped to the cohort and report student concerns to Principal CoE for corrective measures.
- For all academic purposes, Cohort Professor Incharge will report to Principal CoE to ensure there is steady increase in quality of academic delivery of courses mapped to the cohort.

Appendix B: (Responsibilities of a Course Coordinator)

The responsibilities of a course coordinator are mentioned below. The following are the responsibilities of the course coordinator:

- Must have strong expertise in the course or must demonstrate strong zeal to handle the course.
- Must be able to lead the team of faculty delivering the course with appropriate leadership qualities.
- Must be able to identify the quality attributes related to the course and incorporate them with innovative thought process.
- Must be able to conduct a course meeting every week to gauge the conduct of the course across several sections.
- Must check the course exit feedback from the previous semesters to understand the bottle necks and best practices followed earlier.
- Must ensure the course syllabus, reference books, MOOCs are all contemporary and as per the industry needs incorporating feedback from all stakeholders. Any variation needed in these must be brought to the notice of the Department Academic Committee.
- Must ensure the course outcomes, course outcome indicators, CO-PO mapping is all appropriate, unambiguous.
- Must prepare, along with the faculty team, the course handout clearly elaborating the lesson plan, evaluation components; get the course handout approved, through a vetting process, for display to students through ERP.
- Must prepare, along with the faculty team, interactive video content, SLMs, presentation slides, practice problems / case studies for all topics in the course.
- Must prepare multiple sets of question papers for all summative assessments, get them approved through the vetting process and ensure confidentiality and authenticity of these question papers.
- Must prepare, through the help of the faculty team, all the formative evaluation components and set clear timelines for these across multiple sections.
- Must be able to draw uniformity among all faculty in delivering the course
- Must be able to support faculty who have ambiguities or less expertise in the course by providing appropriate training and exercises.
- Must conduct meetings with the course peer mentors to verify their work status and to keep track of their course targets.
- Must be able to coordinate with the faculty team and get the internal evaluation completed in time without any compromise on the quality of evaluation
- Must be able to set the guidelines and rubrics for evaluation of the answer scripts and continuous evaluation components.
- Must be able to keep the evaluation process fair and transparent.
- Must be able to get all the entire team post all the evaluation components in time on ERP (both in-sem and end-sem components)
- Must be able to coordinate with the faculty team in end-sem paper evaluation to ensure there is uniformity and punctuality in evaluation without any compromise in the quality of evaluation.
- Must be able to collect feedback from students of different sections and bring to the notice of the Head of the Department & Principal CoE for any corrective measures that must be taken to improve the quality of delivery of course across all sections.

- Must provide data and check with the counselling incharge whether all the slow learners (based on in-sem summative evaluation) are being counselled appropriately with clear counselling notes recorded in ERP.
- Must provide data and check with the counselling professor incharges if all those students who have less than 85% attendance are being counselled appropriately with clear counselling notes recorded in ERP.
- Must analyse the results of the summative and formative evaluation components of the course and devise remedial plan for the slow learners during the semester.
- Must analyse the overall result of the course, keep a track of those who have backlogs and take the responsibility of conducting and evaluating supplementary exams for both the theory and practical exams as guided by the exam cell at the department/ college.
- Must provide course exit feedback clearly elaborating the conduct of the course, the concerns and the best practices followed in the current semester so that this helps the next course coordinator take forward the course effectively.
- Must maintain the entire course file in both soft and hard copy versions. A course file must contain:
    i. Course handout of the course and the course handout used for the pre-requisite course(s) as conducted for the current batch of students.
    ii. SRP plan and execution details of the course
    iii. Changes made to the syllabus, outcomes and outcome indicators of the course as compared to the previous semesters.
    iv. Minutes of the meeting conducted by the current CC with the previous CCs to understand the execution and best practices followed in earlier conduct of the course.
    v. The course content (SLMs) repository including the lab/skill/tutorial workbooks with clear indication of faculty contribution in preparing the repository.
    vi. Complete playlists of the video lectures developed for the course with shortened and easily accessible URLs.
    vii. Proof of usage of flipped learning pedagogy in the conduct of the course
    viii. Proof of usage of project based learning / case-study based learning and any other learning pedagogies as applicable for the course.
    ix. The details of the formative evaluation conducted in the course and their evaluation rubrics.
    x. The question papers used for summative evaluation during in-sem and end-sem exams, their evaluation key and scheme of evaluation.
    xi. The overall attendance report of the course and the lists of promoted and detained students.
    xii. The result analysis of each evaluation component (including all formative, summative components conducted in-sem and end-sem) and the overall result analysis with clear indication of attainment of each course outcome
    xiii. Atleast 10 sample answer scripts from each of the summative evaluation components of which atleast 3 scripts of slow learners, 4 from the moderate learners and 3 from the advanced learners in the course.
    xiv. Atleast 5 samples of lab/skill/tutorial workbooks with one of each of slow and moderate learners and three advanced learners.

xv. Remedial plan of action and the proofs of conduct for the slow learners with a clear list of slow learners and how they got benefitted due to the remedial plan of action.
xvi. Backup of the entire LMS course shall be x stored in university cloud repository mapped to the official email ID of the CC and a public view link recorded for the same in the course file.
xvii. Minutes of the meetings held by CC for the entire course faculty team.
xviii. Weekly course conduct status report
xix. List of self-learners in the course and their overall result analysis.
xx. List of peer mentors in the course, their evaluation components and their overall result analysis
xxi. Schedule of peer mentoring as conducted in the labs/tutorials/skill sessions.
xxii. Student Feedback Reports and corrective measures taken.
xxiii. Student Satisfaction Survey report
xxiv. Feedback report collected from all faculty at the end of the semester on the conduct of the course.
xxv. Course exit feedback provided by the CC.

Appendix C: (Responsibilities of a Course Instructor)

The following are the responsibilities of the course instructors:

- Coordinate with the course coordinator to understand course objectives and structure.
- Develop lesson plans that align with the course objectives and flipped learning approach.
- Create engaging and interactive pre-class materials, such as interactive videos, SLMs, or activities.
- Prepare question banks and other assessment materials to support the CC in preparing question papers for the summative evaluation components.
- Design in-class activities that facilitate active learning and reinforce pre-class materials.
- Incorporate design thinking concepts and activities in lesson plans.
- Collaborate with other instructors to ensure consistency across multiple sections.
- Regularly update course materials to keep them current and relevant.
- Provide clear instructions and expectations for students.
- Ensure that the learning environment is inclusive and accessible to all students.
- Establish a positive classroom culture that fosters creativity and collaboration.
- Take attendance promptly and accurately and post in mandatorily in ERP within the first 5 mins from commencement of classwork.
- Grade assignments and exams in a timely and thorough manner.
- Provide constructive feedback on student work in both formative and summative evaluation components.
- Identify slow learners and provide additional support to help them understand the concepts. Submit the identified lists to the CC for further support.
- Address student questions and concerns in a timely manner through different media like email, LMS etc.
- Promote student engagement by encouraging participation and discussion both on-campus and online.
- Monitor student progress and adjust teaching strategies as needed.
- Collaborate with other faculty to create cross-disciplinary learning experiences.
- Participate in professional development opportunities to improve teaching skills and stay current in the field.
- Utilize various assessment tools to measure student learning outcomes.
- Integrate real-world examples and case studies into the curriculum.
- Foster critical thinking and problem-solving skills through class activities and assignments.
- Communicate regularly with the course coordinator about student progress, issues, and successes.
- Create a safe space for students to share ideas and ask questions.
- Encourage student reflection on their learning experiences.
- Utilize technology to enhance the learning experience and facilitate collaboration.
- Develop group projects that promote teamwork and communication skills.
- Encourage peer feedback and collaboration among students.
- Assist students in connecting course concepts to their future careers or fields of study.
- Create opportunities for students to apply design thinking skills in real-world situations.
- Maintain and publish office contact hours for individual student support and mentoring.
- Develop and maintain the course shell on LMS.
- Foster a growth mindset among students by encouraging them to learn from mistakes and challenges.
- Utilize active learning techniques, such as problem-based learning or case-based learning.

- Integrate guest speakers and industry experts into the curriculum by sharing their details to the CC.
- Encourage students to seek out additional resources and learning opportunities.
- Incorporate experiential learning activities, such as field trips or hands-on projects.
- Promote ethical and professional behavior and address academic integrity issues among students by insisting on policies related to plagiarism, attendance and malpractices.
- Facilitate student-led discussions and presentations on LMS using the discussion forums.
- Encourage students to develop their own learning goals and objectives.
- Support students in developing strong presentation and communication skills.
- Collaborate with the course coordinator to ensure course alignment with program goals.
- Utilize student feedback to improve course materials and teaching strategies.
- Encourage students to develop a lifelong learning mindset.
- Collaborate with other faculty to share best practices and resources.
- Continuously evaluate and improve the effectiveness of the flipped learning pedagogy and design thinking integration in the course.