

1. Title of the Practice: *Curriculum Restructuring for Enhanced Career Opportunities:*

To provide enhanced career prospects for the student's in-terms of Placements, enrolment to Higher studies and to become Entrepreneur the curriculum is being restructured.

The Context:

SVEC is implementing the autonomy status accorded by UGC to meet the future aspirations of its students by offering demand driven curriculum which caters to the needs of all its stakeholders. Meeting the needs of all the stakeholders is only viable by formulating a demand-driven and updated curriculum through diversified curricular components and program specific specialized courses for its students.

Implementation Plan:

The Departments individually identifies the various requirements of its stakeholders with respect to holistic student development, catering to the diversified student interests in terms of enhanced career opportunities after graduation. The Program Assessment Committee (PAC) of the department, headed by respective Board of Studies Chairperson & Head of the department identifies the various needs of its students from the ~~view point of~~ Stakeholders perspective. The Program Assessment Committee collects the feedback from its stakeholders on the offered curriculum and their suggestions are considered for futuristic improvement of the curriculum.

The PAC of the department prepares the list of courses required to cater to the diversified student interests in terms of placement opportunities, higher education and Entrepreneurship. These diversified lists are further distributed in the program curriculum through course components with different compositions of Knowledge, Skill and Attitude, as required for its students.

The diversified Course components offered to students include Core courses, Program Electives, Interdisciplinary Electives, Open Electives, Mandatory Courses, Audit Courses, Laboratory Courses, Skill-based Courses, Socially Relevant Project, Mini Projects, Seminar, Internship and Project Work. The attainments of the student are measured in terms of Course Outcomes, Program Outcomes and Program Specific Outcomes. These attainments ~~of Outcomes~~ helps in evaluating the student learning outcomes. If any gaps are found in curriculum, then they are supplemented by offering Add-on/Value Courses, activities through Student Professional bodies/society chapters, Department specific Technical Associations etc. The latest trends and progressive technologies are further supplemented with Expert-Lectures, Guest Lectures, Workshops and Orientation Programs.

The following table suggests the purpose of different course components in achieving the desired result for enhanced career opportunities among the students:

| S.No | Component | Purpose (To Provide) |
|------------------------------|-----------------------------|--|
| Curriculum Component | | |
| | Core courses | Pre-requisite knowledge on the courses relevant to the program. |
| | Program Electives | Knowledge on advanced courses in the core and allied areas of the program. |
| | Interdisciplinary Electives | Enable students to gain insight into more academic disciplines in the program of study. |
| | Open Electives | Courses beyond the technical reach of the program that provides career opportunities |
| | Mandatory Courses | Essential learning for a successful Engineer |
| | Audit Courses | An Academic exploration and self-enrichment |
| | Laboratory Courses | Practical Skills required to be demonstrated |
| | Skill-based Courses | Domain specific job skills |
| | Socially Relevant Project | Contributions to the National/Societal development goals and priorities. |
| | Mini-Projects | Strengthen the Skills through effective application of theoretical concepts |
| | MOOC | To build on the engagement of learners who self-organize their participation according to learning goals |
| | Seminar | Enhance skills through Literature survey. |
| | Internship | Enhancement of skill-set for employment |
| | Project Work | Skills in application of Technology and enhancing Employment prospects |
| Supplementary Methods | | |
| | Add-on Course | Career and skill enhancing course beyond curriculum |
| | Value-Added Course | Additional learner-centric and skill oriented technical training |
| | Guest Lectures | Interactive, topic specific learning of advanced topics by Academicians |
| | Expert Lectures | create awareness on future challenges and industry demands through Industry experts |
| | Workshops | Advanced learning in skill-oriented courses |
| | Orientation Programs | Integrate into their futuristic work environment |

These components serve as a tool to provide the required knowledge, Skill and Attitude to prosper and attain their specific goals, thereby achieve the institutional object of catering to enhanced career opportunities for its students.

The above items are carefully devised in terms of course components, discussed in Boards of studies of the departments, approved/revised as per suggestions of the academic and Industry experts. Further it is taken up in Academic council for discussion at institutional level.

SVEC has implemented the above in all its regulations to enhance career opportunities for its students.

Challenges and Resources:

Challenges:

Recruitment and retention of skilled and qualified faculty members keeping in-view of dynamics involved in curricular restructuring. Revising the core and specialized courses and aligning them to meet the needs of all its stakeholders is a tedious task, as it has to cater for many disciplines.

Resources Required:

Skilled faculty members to teach advanced courses, setting up new laboratories, make suitable arrangements to accommodate the new requirements in terms of Equipment and Software.

Expected Outcomes:

The outcomes are expected in terms of a Formulated Curriculum that provides the necessary support to students for: Enhanced Placements and Internships, Preparedness to attempt competitive examinations like GATE, GRE, IELTS etc... and Entrepreneurial abilities. Students gain knowledge and skills in demand-driven areas. Fosters Interests among young graduates to take up Higher studies after their graduation. Creates an Entrepreneurial mind-set and take up incubation and start-up relevant activities and be a successful Entrepreneur. Overall, a Successful Engineer for the society and to the Nation.