Best Practice – 01

Title of the Practice: Curriculum Development for Student Holistic Progression

Objectives of the Practice:

- Imparting Knowledge on core domain and allied courses
- Develop Skills through experiential learning
- Create scope for Application through project based learning and
- Inculcate attitude to lifelong learning

The Context:

To raise standards to cope up with the challenges of the rapidly changing, technologically advanced; culturally diverse societies of today, thereby preparing globally competent students, the educational objectives are planned for establishing the curriculum for each program

The Practice:

Step-1: Need assessment

Stake holders and the need from the curriculum

Students : Technically competent, globally sophisticated, culturally aware, innovative and entrepreneurial outlook.

Parents: Ward's Placement in reputed organizations/ motivation for higher studies in premiere institutes.

Teachers: Dissemination of knowledge, promotion of research, and the training of young and aspiring engineers to apply that knowledge for the general welfare. Create aspirants of tomorrow's world and advancing the frontiers of technology through research.

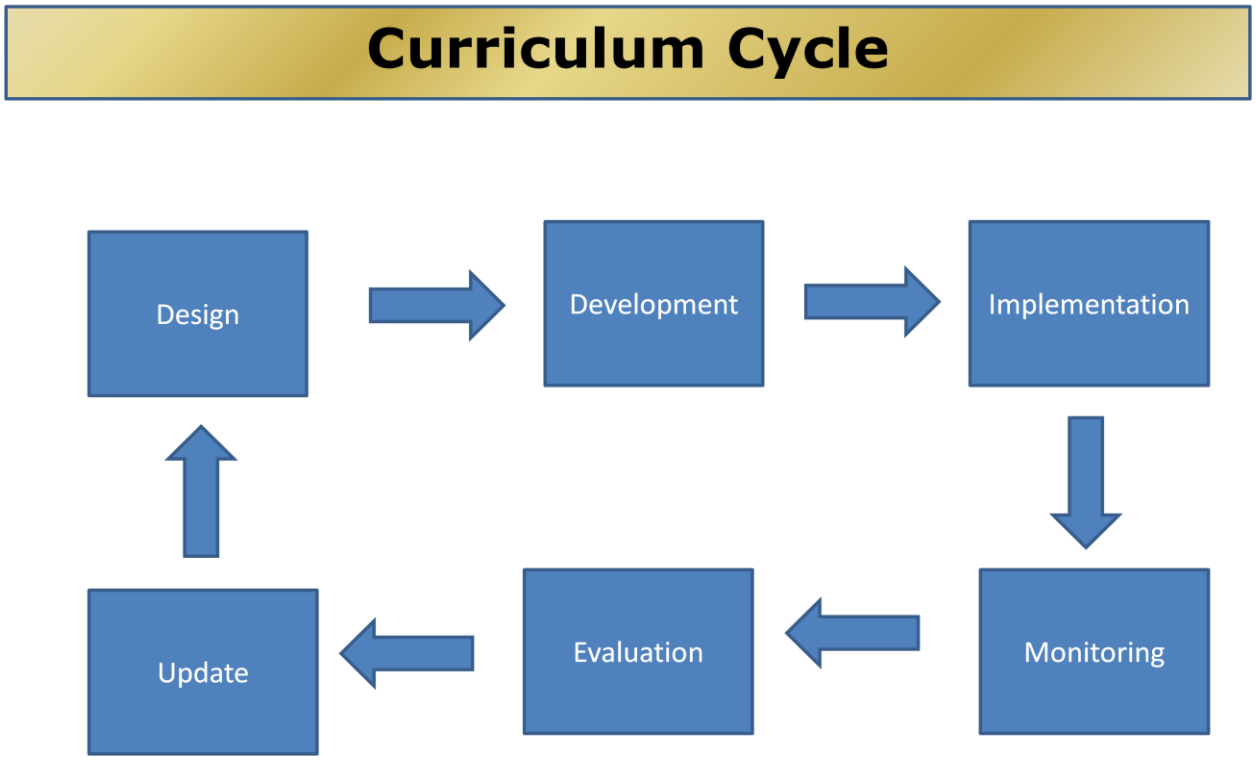
Alumni: Progressive professional career in industry/ R&D organizations.

Statutory Bodies (BoS, AC and GB): Compliance with their inputs/ guidelines.

Employers: Competent employees with futuristic ideas and ethical fabric.

Industry and R&D agencies: Employees with wide spectrum of skills and research zeal.

Step-2: Curriculum cycle



- Course structures of programs are derived from the broad knowledge areas suggested by relevant American Professional Societies such as IEEE, ACM, ASCE, ASME and others professional entities and Industry
- Articulation of program outcomes and program specific outcomes are done for effective course delivery and outcome assessment.
- Scope; Sequence; Continuity; Integration; Articulation and Balance are taken care to design each course of the respective program

- Increased laboratory courses with exercises and innovative activities designed in Student Technical Associations to promote skill development
- Self-learning exercises are given to students to foster self directed learning and thereby creating practice for lifelong learning

Step-3: Implementation:

- Student admission and selection analytics for understanding learning diversity
- Faculty development of the teachers to enable them to transact the curriculum for quality in teaching
- The teaching and learning process is embedded with technology interventions
- Diagnostic, formative and summative assessments for continuous evaluation of student performance
- Providing learning resources through library and internet
- Establishing rubrics for curricular components to measure learning outcomes
- Utilizing the student technical associations to design activities to meet Program Outcomes and Program Specific Outcomes

Evidence of Success:

1. Successful Progression to Higher studies
2. Securing gainful placement
3. Exploring opportunities in entrepreneurship

Problems Encountered and Resources Required

Challenges:

- Academic diversity in student intake

- Compliance to the affiliating University in terms of the degree of academic flexibility and operative freedom while making better-quality curriculum to suit industry standards and research needs

Resources required:

- Associated academic and administrative reforms for effective implementation of the curriculum
- Industry participation in statutory bodies such as Board of Studies and Academic Council to provide insights on contemporary courses suiting employability and demand
- Interactions with expert teachers from National Institutions to elicit inputs on the breadth, depth and balance of the courses in the program domains
- Knowledge, computing, and other infrastructure resources such as Maker's space, research labs, finishing school for acquiring holistic learning outcomes

Notes:

It is always a quality initiative, if the curriculum serves the purpose of student development and helps students to pursue their personalized interest of either opting for progression to higher education / seek gainful placement / or engage in entrepreneurship. And the College is in the constant endeavor to continuously revise curriculum to attain better student learning outcomes and holistic progression