INSTITUTIONAL VALUES AND BEST PRACTICES

Best Practice 1: Outcome-Based Education

1. Objectives of Outcome Based Education:

- To design the curriculum framework of the program integrating well defined learning outcomes.
- To use rubrics-based assessments.
- To ensure alignment between curriculum, instructional methods, and assessment practices to effectively measure student attainment of outcomes.
- To establish a quality assurance system and program improvement practices based on feedback from various stakeholders.

2. Context of the Best practice:

In the context of OBE, at program level, the OBE process begins with defining vision and mission statements, followed by developing Program Educational Objectives (PEOs). Then a set of Program Outcomes(POs) as per Washington Accord guidelines and Program Specific Outcomes(PSOs) are developed. Once this program structure is done, curriculum framework integrating a well-defined course outcomes (COs) for each course is designed at the course level. The mapping of COs with one or more POs and PSOs are done in order to measure the attainment of PO and PSO.

3. The Practice and its Uniqueness:

- In the context of OBE, curriculum and syllabus for each course is designed towards the attainment of PEOs, POs, PSOs and COs.
- A structure feedback mechanism involving faculty, student, alumni, subject and industry experts regarding PEOs, POs and PSOs is established, ensuring the necessary revisions in curriculum and syllabi in relevance to technical and industry demands.
- Internal Quality Assurance Cell was established for the periodic assessment of outcomes and identify discrepancies for further improvement at institute level, while Program Advisory Committee(PAC) and Board of Studies (BOS) at program level.
- The rubrics based assessment practice is implemented for the evaluation of CO and PO attainment.

- Students-centric methods such as NPTEL courses, Industrial Project, Internship and skill based innovation courses and students-centric learning infrastructure such as Innovate TN and AR-VR lab are established.

4. Evidence of success:

- Success in OBE implementation at GCE, Salem is evident through its integration into all programs. Workshops were conducted to enhance faculty skills and knowledge in OBE, supplemented by certified courses from NITTT.
- Question papers are meticulously designed aligning with Course Outcomes and Bloom's Taxonomy.
- The preparation of an OBE manual streamlines the evaluation process and provides clear guidelines for faculty, contributing to the effective implementation and evaluation of OBE across programs.
- For each program, assessment methods based on rubrics are utilized to evaluate the attainment of Program Outcomes (PO) and Program Specific Outcomes (PSO). Target levels are set, and the results are analyzed to measure achievement. Establishment of PAC facilitates the preparation of action taken report for further improvement.
- Our students consistently outperform in state and national level exams and quality improvement is evident through increment in top salary package offered.
- Analysing the academic performance trends between the two batches reveals both strengths and areas for improvement.

	2018-2022 Batch	2019-2023 Batch
UG		
First Year	77.52	71.30
Final Year	98.00	99.39
PG		
First Year	96.67	96.97
Second Year	100	100

5. Problems encountered and resources required:

The main challenge that the institution faced is adoption of faculty members towards transitioning from traditional teaching methods to the OBE approach, as it requires the development of new program curriculum making

all possible adjustments in existing courses and introducing new courses with well-defined course outcomes, which, in turn, are to be mapped with PEOs, POs and PSOs. To overcome this, the following approach was adopted:

A series of workshops and seminars were organised for faculty members to understand the principles of OBE and how to implement them effectively.

Additional information :

https://gcesalem.edu.in/sites/gcesalem.edu.in/files/uploaded%20files/BEST%20PRACTICE%20-1%20OBE.pdf

Best Practice 2: Clean and Green Campus

1. Objective of the practice:

To promote sustainable environment through effective waste management, energy conservation, sustainable resource use, and afforestation initiatives.

2. The context:

One of the major challenges encountered by GCE Salem in its green campus initiatives is maintaining sustainability across its approximately 231 acres campus. Higher education institutions play a vital role in contributing to the Sustainable Development Goals (SDGs) through environmental disclosures. Recognizing the growing need for green initiatives on campus, Environmental Club involving both faculty and students has been established by focusing on energy, water, and waste management.

3. The practice:

- Miyawaki method is being practiced in the institution, i.e., selecting appropriate native tree species, involving the college community in planting activities, and ensuring the long-term care and expansion of these green areas. On request from the Principal, Tamil Nadu Forest Department have planted 7810 trees of 21 different varieties under TNRSP-II scheme at the campus.
- Use of bicycles for mobility within the campus and nearby is in practice.
- Entry of heavy vehicles inside the campus is restricted.
- The solar energy-based street lighting system, water heating system for hostel and solar power plant (9.9 kWP) is implemented. LED lights are installed phase by phase in the campus which can reduce the energy consumption.

- The college has strategically placed compost pits to manage waste effectively. Food waste from the hostel is collected daily and utilized for cattle feed through auctions. Additionally, the initiation of a biogas plant with a capacity of 200kg in hostels is underway.
- The wastewater generated in departments is minimal, allowing for disposal through groundwater passage as its quantity is small, with most of it naturally evaporating. Hostel wastewater is directed to oxidation ponds, facilitating the organic matter's decomposition through biological processes.
- For effective water management, the following techniques are employed:
  Rainwater harvesting
  Bore well /Open well recharge.

4. Evidence of Success:

- Use of LED bulbs, solar street lighting and solar invertor inside the campus has significantly reduced the energy consumption.
- Effective awareness programs have led to the creation of a green, plastic-free campus, with the adoption of cloth banners for all college functions.
- Regular environmental and energy audits are conducted by the institution to ensure ongoing sustainability efforts.
- The institution was recognized with the Best Green Campus Award in the year 2022.

5. Problems Encountered and Resources Required:

As the college campus spans over 231 acres, transforming into eco-friendly campus requires more investment of fund and large manpower.

Additional information:

https://gcesalem.edu.in/sites/gcesalem.edu.in/files/uploaded%20files /BEST%20PRACTICE%20-2%20CLEAN%20AND%20GREEN.pdf