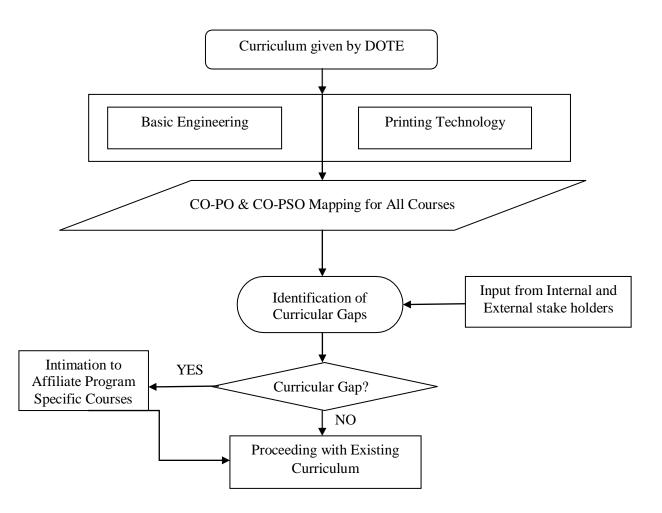
PROGRAM CURRICULUM AND TEACHING LEARNING PROCESSES

Program Curriculum

Process Diagram to Identify Extent of Compliance of the Board Curriculum for Attaining the

Program Outcomes and Program Specific Outcomes



The extent of compliance of Board curriculum with the POs & PSOs are identified and the process

adapted to find out the curricular gaps as mentioned below:

A: The Curriculum is divided broadly into Three Categories as listed below.

- 1. Basic Engineering
- 2. Printing Technology
- 3. Program Specific Courses

B: Each Subject is mapped into the corresponding Category, Program Outcome and Program

Specific Outcome as shown below:

Categories of Curriculum	Subjects	Percentage of Contribution	Mapped Program Outcome	Mapped Program Specific Outcome
	Communication English -1	14.2	PO1, 9,10	PSO1,2,3
	Engg. Mathematics – 1	22.8	PO1,2	
	Engg. Physics – 1	14.2	PO1,2,3,4	
	Engg. Chemistry – 1	14.2	PO1,2,3,4,6	
Basic	Engg. Graphics – 1	14.2	PO1,2,3,4,8,9,10	
Engineering	Engg. Physics Practical – 1	5.7	PO1,2,3,4	
	Engg. Chem Practical – 1	5.7	PO1,2,3,4,6	
	Workshop Practical	8.5	PO1,2,3,4	
	Communication English -2	14.2	PO9,10	
	Engg. Mathematics – 2	14.2	PO1,2	
	Applied Mathematics	14.2	PO1,2,3,4	
	Engg. Physics – 2	14.2	PO1,2,3,4	
	Engg. Chemistry – 2	14.2	PO1,2,3,4,6,10	
	Engg. Graphics – 2	17.1	PO1,2,3,4,8,9,10	
	Engg. Physics Practical – 2	5.7	PO1,2,3,4	
	Engg. Chem Practical – 2	5.7	PO1,2,3,4,6	

	Printing Processes	17.1 (6)	PO1,2,3,4	DCO1 2 2
	Visual Design and DTP	14.2 (5)	PO1,2,3.4,9	PSO1,2,3
Printing	Image processing	17.1	PO1,2,3.4,9	
Technology	Comp. Application Practical	11.4 (4)	PO1,2,3.4,9,10	
	Design Studio Practical	11.4	PO1,2,3.4,10	
	Image processing Practical	14.2	PO1,2,3.4	
	Print Primer Practical	11.4	PO1,2,3.4	
	Offset Printing Technology Flexo Gravure and Screen	14.2	PO1,2,3.4	
	Printing Print Finishing and	17.1	PO1,2,3.4	
	Converting	14.2	PO1,2,3.4,5,6	
	Printing Materials DTP for Print Production	14.2	PO1,2,3.4,5,6	
	Practical	14.2	PO1,2,3.4,6,7	
	Offset Printing Practical	11.4	PO1,2,3.4,5,6,8	
	Print Finishing Practical	11.4	PO1,2,3.4,5,6,8	
	Digital Pre Press	14.2	PO1,2,3.4,5,6,8,9	
	E-publishing Advanced Printing	14.2	PO1,2,3.4,5,6,8,9	
	Technology	17.1	PO1,2,3.4,5,6,7,8	
	Packaging Technology Life Skills and	17.1	PO1,2,3.4,5,6,7,8	
	Communication Practical	11.4	PO1,2,5,6,7,8,9,10	
	Digital Pre Press Practical	11.4	PO1,2,3.4,5,6,8,9	
	Packaging Practical	11.4	PO1,2,3.4,5,6,8,9	
	Total Quality Management	17.1	PO1,2,3.4,5,6,7,8,	
	Printing Press Management Printing Machinery	14.2	9 PO1,2,3.4,5,6,7,8,9 ,1 0	
	Maintenance Quality Assurance Practical	17.1 14.2	PO1,2,3.4,5,6,7,8 PO1,2,3.4,5,6,7,8,	
	Printing Machinery Practical Industrial Exposure and	14.2	9 PO1,2,3.4,5,6,7,8,9 ,1 0	
	Report Project Work	8.5 11.4	PO3.4,5,6,7,8,9,10 PO3.4,5,6,7,8,9,10	
Program	3D Printing	8.5	PO1,2,3,5,6,7,8,9,	PSO1,2,3
Specific	Textile Printing	8.5	10	PSO1,2,3
Courses	e	8.5	PO1,2,3,5,6,7,8,10	PSO1,2,3
	Arts and Technology		PO1,2,3,5,6,7,8,9, 10	

Program Outcome	Weightage (PO count) based on the mapping of Subjects	Percentage
PO 1: Basic knowledge	70	14.8
PO2: Discipline knowledge	71	15.0
PO3: Experiments and practice	70	14.8
PO4: Engineering Tools	71	15.0
PO5: The engineer and society	30	6.4
PO6: Environment and sustainability	47	10.0
PO7: Ethics	19	4.0
PO8: Individual and team work	35	7.4
PO9: Communication	40	8.5
PO10: Life-long learning:	19	4.0

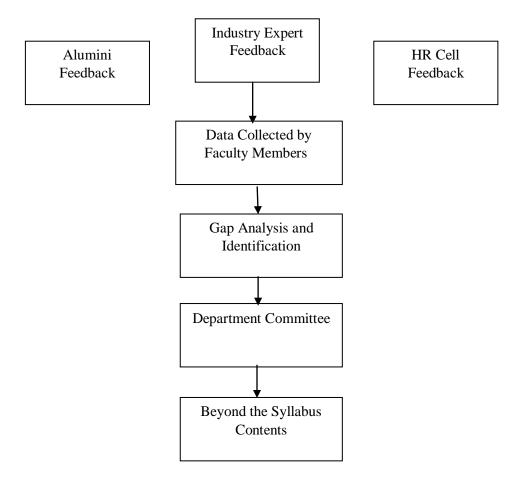
From the above table, POs having minimum weightage are identified as the curriculum gaps.

Program Specific Outcome	Weightage (PSO count) based on the mapping of Subjects	Percentage
PSO1: To understand the concept & applications in the field of Print Media and to pursue lifelong learning & earning in the global industries.	4	26.7
PSO2: To excel as experts with the high level of professional standards & ethics and thus become ambassadors for the institute and the print industry.	5	33.3
PS03: To become multifaceted technicians and excel in the interdisciplinary branches such as Vis.Com, Graphic Arts, 3D Printing & Packaging, e-publishing, Textile printing and electronic printing.	6	40.0

From the above table, PSOs having minimum weightage are identified as the curriculum gaps.

C. Identified Curricular Gaps based on POs and PSOs are given below:

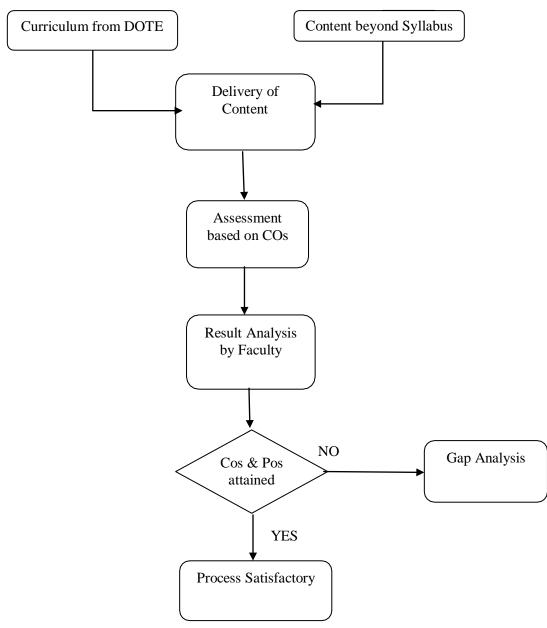
The procedure adopted for finding the curriculum gaps is shown in fig 2.1 while figure 2.2 indicates the process adopted for the identification and modification of curricular gaps for the attainment of the CO's /PO's



Curriculum gap analyses

2.1.1. Contents beyond the Syllabus (20)

The curricular gaps are intimated by the faculty to the Head of the Department which in turn is being discussed with the Principal. Necessary modifications in the curriculum are intimated to the DOTE by the Principal, further the gaps are strengthened by conducting following activities.



Process for the identification and modification of curricular gaps for the attainment of COs / Pos

CAY (2018-2019)

S. No.	Gap	Action taken	Date- Month - Year	Resource Person with designation	% of students	Relevance to POs, PSOs
1	Additive Manufacturing	Seminar on Digital Manufacturing Design and Concept related to Printing	22-Aug- 2018	Mr. Rosu Reddy Mr. Eswar Mr. Saravan	100	Strong
2	Science for Printing	Seminar on Science for Printing	05-Sep- 2018	Mr. JohnPaul Mr. V. John Fredrick	100	Strong
3	Science for Printing	Workshop on Science of Printing	12-July- 2018	Mr. V. John Fredrick Mr.	100	Strong
4	Mathematical skill for printer	Costing and Estimation workshop with inhouse software	09-Jan- 2019	Mr. Albert Mr. Parthasarayth Mr. V. John Fredrick	100	Strong
6	Textile Design and Printing	Workshop on Textile Design and Printing of fabrics	22-Jan- 2019	Mr. Subramanian	100	Strong

7	Arts and Technology	Regular Class on Arts and creative techniques and	Regular Weekly 9 Hours	Mr. Johnson	100	Strong
		skill.				
7	Visual Design	Workshop on Visual Design and Layout	11 Dec 2018.	Mr. Bosco	100	Strong
8	Paper Bag making	Paper Bag making workshop by SIGA course Students.	Nov 1, 2018	Mr. Subramani	100	Strong

CAY*m*1(2017-2018)

S. No.	Gap	Action Taken	Date- Month- Year	Resource Person with designation	% of students	Relevance to POs, PSOs
1	0	Seminar on Digital Manufacturing Design and Concept related to Printing	02-July- 2017	Mr. Rosu Reddy Mr. Eswar Mr. Saravan	100	Strong
2	Science for Printing	Seminar on Science for Printing	17/-Sen-	Mr. JohnPaul Mr. V. John Fredrick	100	Strong
3	Science for Printing	Workshop on Science of Printing	0	Mr. V. John Fredrick.	100	Strong

4	Mathematical skill for printer	Costing and Estimation workshop with in-house software	03-Dec- 2018	Mr. Albert Mr. Parthasarathy Mr. V. John Fredrick	100	Strong
5	Textile Design and Printing	Workshop on Textile Design and Printing of fabrics	04-Jan- 2018	Mr. Subramani	100	Strong
6	Arts and Technology	Regular Class on Arts and creative techniques and skill.	Regular Weekly 9 Hours	Mr. Johnson	100	Strong

CAY*m*2 (2016-2017)

S. No.	Gap	Action Taken	Date- Month- Year	Resource Person with designation	% of students	Relevance to POs, PSOs
1	g	3 Seminar on Digital Manufacturing Design and Concept related to Printing D Printing	13- July- 2016	Mr. Rosu Reddy Mr. Eswar Mr. Saravan	100	Strong
2	Science for Printing	Seminar on Science for Printing	09- Aug- 2016	Mr. JohnPaul Mr. V. John Fredrick	100	Strong
3	Science for Printing	Workshop on Science of Printing	20- Sep- 2016	Mr. V. John Fredrick	100	Strong
4	Mathematical skill for printer	Costing and Estimation workshop with in-house software	15- Nov- 2016	Mr. Albert Mr. Parthasarathy Mr. V. John Fredrick	100	Strong
6	Textile Design and Printing	Workshop on Textile Design and Printing of fabrics	21-Jan- 2017	Mr. Subbramani	100	Strong

		Regular Class on Arts and creative	Regula	Mr. Johnson	100	Strong	
	05	techniques and skill.	r				
			Weekl				
			у б				
			Hours				



Seminar on PSLV from ISRO



HUIST

PaperBag making workshop by SIGA course students.

International certified English Language Skill training. BULATS Cambridge English language training and testing series



Workshop on Scinece of Printing

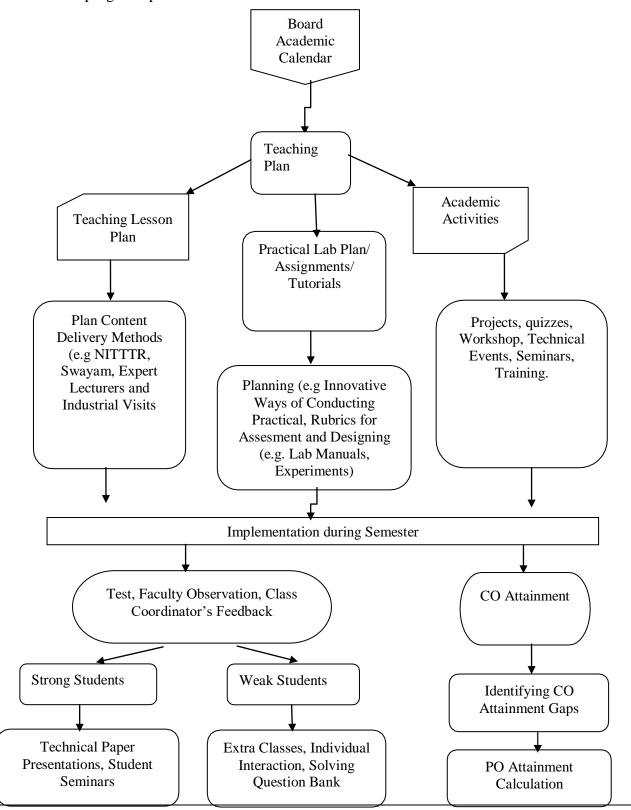


Session on Color Theory

2.2 Teaching - Learning Processes

2.2.1. Processes followed to improve quality of Teaching & Learning

The SIGA College follows several best practices for the attainment of Program outcomes and program specific outcomes in consent with Dote curriculum:



Academic Calendar:

Academic calendar and semester plan are prepared well in advance with all the activities of the academic year which includes

- 1. Academic audit.
- 2. Social Classroom forum
- 3. Professional activity.
- 4. Academic Internal assessment schedule.
- 5. Industrial visit.
- 6. Industrial training.
- 7. Syllabus coverage schedule.
- 8. Guest lectures.
- 9. Project review schedule.

For the attainment of course outcome schedule is checked by HOD.

Pedagogical Initiatives:

- Authentic examples
 - 1. Hands-on projects
 - 2. Experimental learning
 - 3. In-plant training
 - 4. Industrial visits

Collaborative learning strategies

Life-long learning in the College is becoming a necessity rather than an ideal. The need for collaboration is great and will continue. By facilitating collaborative methods of learning:

1. **Collaborative Network Learning** (CNL) Enables developers of learning

systems to work as a network in can share and build knowledge into courses in

a collaborative environment.

- 2. **Computer Supported Collaborative Learning** (CSCL) systems use technology to control and monitor interactions, to regulate tasks, rules, and roles, and to mediate the acquisition of new knowledge)
- 3. Learning Management System (Virtual Classrooms (i.e. geographically distributed classrooms linked by audio-visual network connections), chat, discussion threads, application sharing (e.g. a colleague projects spreadsheet on another colleague's screen across a network link for the purpose of collaboration), among many others.
- 4. **Student presentations** is a channel for **students** to share with others what they have learned
- 5. **Brainstorming** group creativity technique by which efforts are made to find a conclusion for a specific problem by gathering a list of ideas spontaneously contributed by its members
- 6. **Role play** is the changing of one's behaviour to assume a role, either unconsciously to fill a social role, or consciously to act out an adopted role.
- 7. **Debate** is a fun activity akin to a game in which we examine ideas and policies with the aim of persuading people within an organized structure.
- 8. **Quiz** is a form of game or mind sport, in which the players attempt to answer questions correctly. It is a game to test your knowledge about a certain subject.
- 9. **Online forum** is a great place to discuss any particular topic with the likeminded people. These forums are internet-based group communities where one can start a discussion, or get an answer of your query or even search for new ideas & solutions.
- ✤ ICT supportive learning

The following teaching – learning methods are being used by the faculty for better content delivery

- 1. Simulation
- 2. Animation
- 3. You tube demos

- 4. Online tests.
- 5. e-learning resources:
 - a. Online Campus website
 - b. Online E Books
 - c. Online Video Tutorials

Methodologies to Support Slow Learners and to Encourage Elite Students.

a. Appointment of Class Coordinators and Mentors:

- The department has appointed Class coordinators for each semester to monitor a class of students.
- Student Mentor is also appointed for every 20 students entering in the First year. This Mentor establishes a close relationship with each student, orients them to college practices, follows their progress regularly (e.g., with at least fortnightly/monthly meetings) and guides them throughout the four-year course.
- The class coordinator will take care of academic performance of the whole class and coordinates teaching learning process implementation.

b. Diagnosing and Tracking Student Performance and Attendance:

• The performance of students is reviewed by each course teacher during the semester.

Based on the marks obtained in their assessment, the students are identified as slow learners, if they score less than 60 % in each subject.

- The efforts will be made to strengthen teaching, and/or provide additional teaching as needed. Reviewing student attendance in connection with performance, and advising students about attending classes, making up classes missed, and giving additional help are also useful.
- A History card system is used for each student, and carried through for the four college years.
- c. Improving Academic Performance:
 - The performance of the slow learners is improved through Tutorial classes, where additional problems are solved and students interact with each other in addition to a faculty member for each 20 students.

- The department has a **Student Academic Support Program** which could systematically provide additional classes, notes and guidance.
- Student and faculty collaboration on Laboratory experiments, Mini project, and major projects are available to students formally and informally and more focus -attention will be given to slow learners of the group.

d. Enhancing Communication and Presentation Skills:

- The department in coordination with English department provides slots in English language Laboratory, where students can listen to tapes and use workbooks to improve their English, particularly spoken English in which they are weak. Such students will be given special chances and such opportunities are not only confined to elite students.
- Slow Learners are provided with language and soft-skill development throughout their education (not only in the last two or three semesters). This makes the slow learners more interactive and oriented to confidence-building, rather than "examoriented," and "job-oriented".

e. Peer Learning Groups:

- An organized approach to involve slow learners in forming groups of 4 to 6 students good and weak mixed, who learn jointly is established in the department. They can revise lessons after class or on weekends, before any assessments.
- Elite students will help the slow learners. The act of tutoring also helps elite students. There is a "vertical" integration, i.e., senior students can work with juniors, and student-faculty interactions are also enhanced, where faculty members being available as resource persons to the student learning groups and even interacting informally with them. The pairing of elite students and slow learners results in better academic performance.

f. Class Room Teaching

- Faculty use traditional chalk and board method and also use other methodologies like power point presentations, over head projections for better understanding of the course.
- Innovative methods like explaining with the help of models, animations, charts, real time analogies and brain storming are made which make the class room teaching more interactive and interesting.
- Tutorial classes are conducted for analytical subjects where a class of students is divided into three groups, each with a teaching faculty. Therefore individual attention can be given to the students to solve the problems.
- Board Exams questions are solved in the classrooms.

- It helps in the obtaining a sound understanding of the course fundamentals, design and implementation issues, etc.
- For the attainment of course outcome, academic audits are conducted twice in a semester where the completion of syllabus, tutorial classes and assignments are monitored.

Increasing Student Participation in the Classroom:

- a The students of different learning abilities are grouped together. The groups are instructed to choose topics from the syllabus, which may be different or the same. The groups are made to present a seminar for 10 to15 minutes each, showing how an issue can be looked at from different perspectives. Making one group of students present and the other groups ask questions is a good method to get students to interact, think and discuss.
- b. The students are given assignments to prepare charts and are instructed to submit for review. After the review, the best charts are selected and they will be displayed in the classroom.
- c. On-line assignments are also given to increase the student's participation in the class room and they are also asked to collect other on-line materials including movie clips, simulations, and Laboratory demonstrations given in the syllabus. This enables the "backbenchers" to come to the front, thus making less confident, bored or disruptive students engaged.

Experiments

- Faculty prepare laboratory manual well ahead of the semester which includes Do's and Don'ts of the laboratory, list of experiments, the procedure on how the experiments are to be done and sample calculations.
- Faculty test runs the experiments before starting of the semester and makes a record in laboratory manual which helps in offering constructive suggestions to the students.

In order to attain the COs and POs the following performances Indicators are used as guidelines for the conduction of experiments in the laboratory:

- 1. **Ability to conduct experiment**: The students will be able to conduct the entire experiment with negligible help from the faculty Members.
- 2. **Data observation and presentation**: The students will observe and measure the experimental data very accurately; very systematically and present data very clearly using appropriate graphics, figure captions and units.
- 3. **Data analysis and interpretation**: The students will analyze and interpret experimental data correctly and precisely and make useful conclusions. They also compare theory against experiment and calculate related error.
- 4. **Subject Knowledge**: The students will fully understand the experiment, including its purpose and results and be able to discuss experimental protocols in a clear and précis

manner.

Continuous Assessment in laboratory:

- The students are asked to maintain an observation and record of all the experiments done in the laboratory.
- The observations and records are evaluated on weekly basis.
- The faculty makes a record of the date on which the experiment is done, the date on which the observation and records are evaluated which helps in continuous monitoring and assessment of the students. This also aids in completing the laboratory course within the stipulated time.
- To evaluate course outcome, model exams are conducted at the completion of laboratory course.

Student's feedback of teaching learning process and action taken:

- **1.** Semester Course Outcome (CO) Report: These contain information on student performance and feedback and actions taken in consequence thereof.
- 2. Semester Programme Outcome (PO) Report. These include an analysis of statistical data on student achievement and progression in the internal assessment and Anna University Examinations. The failure rates and the academic performance of the students are analyzed. The Reports will record any significant difficulties that have been identified from student feedback about the faculty who handled the course and actions taken in consequence of these.
- **3. Periodic Review.** The Class committee meeting will analyze the performance of the students and the Department will review the performance of the faculty members based on student's feedback twice in a semester.
- **4. Board examination result.** These relate to both academic standards and to the quality of teaching and learning and may provide statistical data on the attainment of COs and POs.
- 5. Course feedback after Completion of the syllabus. Held on the last day of each Semester, this provides an open forum for students to provide feedback about each term, including all the courses, guest seminars, workshops and other activities. Elected student representatives will pass on student comments anonymously if so wished but the spirit of the sessions is informal and the intention is to create a constructive dialogue between students and staff.
- 6. Academic audit. The Committee usually meets twice a Semester to discuss all aspects of the programme and to take action, where necessary, in respect of student feedback. The Academic audit Committee ensures that Graduate attributes are conducted in accordance with COs and reports to the Principal.

7. Centralized online student feedback System:

The faculty members are evaluated through the online feedback system on their teaching and learning process twice in the semester. Depending on the feedback suggestions and guidelines are given to the corresponding faculty. The feedback is collected with the following parameters as follows:

- Organization of the subject matter in a logical sequence
- Faculty coming to the class on time and engaging regularly
- Preparation made by the faculty on the subject
- Faculty's knowledge on the latest developments in the subject area
- Faculty's ability to maintain discipline in the class
- Assistance and Counseling offered by the faculty to the needy students
- Faculty's appreciation and feedback on the students" performance
- Ability to take class audibly and clearly
- Usage of various methods and materials like OHP, Presentation to take class
- Ability to write and draw legibly
- Teacher's ability to explain the concepts well and provide adequate examples
- Ability of the faculty to give instructions to the students according to their understanding
- Fare and impartial valuation of the answer papers
- Regular conduction of assignments tests and returns the answer papers on time.
- **8. Staff Appraisal.** With regard to the student feedback, actions are taken (if feedback score is less than of equal to 2.5) during appraisal of the faculty.

2.2.2. Initiatives to improve the quality of semester tests and assignments Initiatives:

 ✤ A committee is formed comprising of Head of the department, senior faculty members and course coordinator

- ✤ The Senior Faculty member handling the subject is fixed as the Course coordinator.
- All the faculty members are advised to set the question paper which will make the students think analytically.
- Every Question Paper includes a few higher order thinking questions which are challenging for the mind.
- Multiple question papers are collected from the course instructors and best among them is selected by the committee.

Process to ensure questions from outcomes /learning level perspective:

There are 3 written regular examinations namely Continuous Assessment Test and practical examination in line with academic schedule of the department. The objective of the committee is to maintain the following attributes to attain the COs, POs and PEOs.

- 1. Clarity
- 2. Reliability
- 3. Validity
- 4. Authenticity
- 5. Fairness

Clarity: The following points are avoided while setting the question paper for internal assessment.

- a. Unclear test instructions
- b. Confusing and ambiguous terminology
- c. Being overly verbose
- d. Using complicated vocabulary
- e. Difficult or poor sentence structure
- f. Unnecessary and distracting detail.

Reliability: The following points are given as guidelines for the question paper setters to maintain reliability.

a Does the question allow faculties to grade it consistently and does it allow faculties to discriminate between different levels of performance?

b. Does the question paper elicit an accurate measure of a student's ability to demonstrate their knowledge and skills?

Validity: The following points are given as guidelines for the question paper setters for validity.

- The Question paper setters ensure that the questions measure the achievement of the intended learning outcomes of the unit module.
- The form of the examination question may also include Short and Essay Type Questions.

Authenticity: The Question paper setters are given guidelines to maintain the authenticity to match the style and approach of question setting to the reality of practice to attain COs and POs. They will consider the testing of "procedural knowledge" or "functioning knowledge" **Fairness:** The question paper setters will give students a fair chance to demonstrate what they know and what can they do. Fairness can be facilitated by the faculty members by giving following guidelines:

- a. Being very clear about expectations in student performance.
- b. Providing examples of past examination papers.
- c. Opportunities for students to practice in Mock Examinations.

Evaluations:

After each Continuous Assessment Test and Daily test, each course handling faculty member evaluates the answer scripts within 3 days after completion of the examination. They prepare reports to analysis the learning level of the students to attain the COs and POs. The faculty members prepare the report as follows:

A. Test Scores:

Blooms Level	CO1	CO2	CO3	CO4	••••	COn
Q.No	1	2	3	4		N
Marks						
Student 1						
Student 2						

The marks scored by each student is entered in the above format in an excel sheet and

analyzed. The data required for the analysis are given below:

Class Strength	Total No. of students attended	No. of students absent	% of students attended

B. Details of the score sorted in intervals

Total Brogent	Total	0-15	15-30	30-45	45-60	60-80	80-100
Present	absent						

Evaluation Outcome:

- a. Analytical strength of the class
- b. Students with multiple skill set
- c. Students inclined in particular skill set
- d. The teaching method to meet all students of all skill sets
- e. Number of academically weak students in the course.

Assignments

The following types of assignments are given to the students to make them attain the

Course outcomes of the programme.

- a. Writing Essays or problems on the topics given in syllabus.
- b. Writing Term Papers on the topics given in syllabus.
- c. Internet Assignment
- d. Field Assignment
- e. Library Assignment on latest Trends.

2.2.3. Quality of Experiments

Identification of projects and allocation methodology to Faculty Members

- Project Coordination Committee is formed by HOD comprising of senior faculty members.
- Project teams were formed based on student"s area of interest to design and develop solutions for complex problems.
- Sale on faculty area of expertise, HOD allocates Supervisor for the project teams.
- Students can undertake Industry based projects under the guidance of Project Coordination Committee and the academic supervisor.
- Students are instructed to refer reputed magazines and identify the problem statement and propose suitable solution.
- The working methods, time line, roles and responsibilities must be defined first. They have to plan the project and divide the tasks between themselves.
- Summer, winter and Mini Projects have been incorporated in order to enhance and utilize the creative potential of the students and built positive attitude, which will help them in their social & technical life.
- The project is designed to help students develop practical ability & knowledge about practical tools, techniques in order to solve real life problems and also connect with society. It also helps them to work in teams.

Process for Monitoring and Evaluation

- The teacher acts as a facilitator by initiating the project and giving guidance, input and feedback during the project.
- He/She encourages all the students to participate and ensures that the student accomplish their tasks as scheduled.

- The progress of the project is evaluated based on minimum three reviews at various stages of the project implementation.
- The review committee consisting of senior faculty member is constituted by the Head of the Department.
- Students will present the progress of their project for each stage of implementation during each review meeting conducted by the review committee.
- The presentation will cover all the relevant factors, from the problem formulation till the particular stage along with the simulation and hardware details which they have inferred before the review.
- The presentations will also contain snapshots of the various stages of implementation of the hardware and also screen shots of the simulation test results.
- The reviewers will take the points presented into consideration and the test data / results / screenshots and elicit information on those angles not covered or partly covered in the presentation.
- The reviewers, taking a 360 degree view of the project, shall also rate the projects on objective criteria, agreed amongst them by consensus. They shall record the criteria of selection, rating achieved under each such criteria and their overall comments in respect of each of the reviewed project.
- The feedback of the performance will be given to students to improve the quality of work.

Process to assess individual and team performance

- The Project Coordination Committee evaluates the quality of project work, their Individual and Team performance and their communication and Presentation Skills.
- ♦ A Project evaluation form is used as a measure to evaluate the performance of project.

The Project Coordination Committee will continually evaluate their progress and suggest Changes to enrich their work.

2.2.4. Quality of students Projects and Report writing (25)

Project Coordination Committee evaluates the quality of project based on the

following criteria:

- Design, Analysis and Implementation as well as presentation.
- Application oriented, Research oriented and projects having societal impacts.
- Projects suitable for applying for patents. Publishing papers in National conference, International conference and reputed journals.
- Project enabling the students to improve their organizational and research skills which develop better communication with their peers.
- Cost effectiveness.

2.2.5. Industry Interaction and Industry Internship / Training (30)

SIGA – NexGen 3 D Printing Lab

The SIGA-Next Generation 3D Printing Centre of Excellence is a training facility partnering with local research institutes and industry to facilitate growth and education around 3D printing in Chennai.

The centre powered with training professionals, validating 3D printing technologies and materials, as well as research 3D printing overall. Partnerships with such institutes as the Indian Centre for 3D Printing and the Advanced Remanufacturing and Technology Centre, the SIGA- Next Generation 3 D Printing Center of Excellence will offer training curriculum, validation programs, advisory services, and research.

SIGA – Jai Academy Textile Design and Printing Lab

The SIGA-Jai Academy Textile Printing and Design is a training facility partnering with industry to facilitate growth and education around Textile Printing in Chennai. The centre is fitted with fully functional and equipped lab with training professionals, validating Textile printing technologies and materials. Partnerships with such institutes as the National Institute of Fashion Technology and Govt.

College of Fine Arts, the SIGA Textile Printing Center of Excellence will offer training curriculum,

validation programs, advisory services, and research.

Industry involvement in the Program design and partial delivery of any regular courses for students:

Value Added Course Details:

- ✤ Value added courses are conducted to enrich students skill set.
- ✤ Head of the Department along with Lecturer frame the Value Added Courses to be conducted.

CAY(2018-2019)						
S.No.	Date	Name of the course	Name of the Company/Industry			
1	20 to 24 Aug 2018	Packaging Pre- Media	SIGA			
2	26-Nov – 30 Nov 2018	Graphic Designing (Illustrator, Photoshop)	SIGA			
3	26-Nov – 30 Nov 2018	Layout and Pagination Art	SIGA			
4	26-Nov – 30 Nov 2018	Arts and Crafts	SIGA			
5	26-Nov – 30 Nov 2018	Textile Design and Printing	SIGA			
6	26-Nov – 30 Nov 2018	Offset Printing	SIGA			
		CAYm1(2017-2018)				

CAYM1(2017-2018)

S.No.	Date	Name of the course	Name of the Company/Industry
1.	17 to 25 Aug 2017	Packaging Pre- Media	SIGA
2.	04-Dec – 09 Dec 2017	Graphic Designing (Illustrator, Photoshop)	SIGA

3.	04-Dec – 09 Dec 2017	Layout and Pagination Art	SIGA
4	04-Dec – 09 Dec 2017	Arts and Crafts	SIGA
5	04-Dec – 09 Dec 2017	Textile Design and Printing	SIGA
6	04-Dec – 09 Dec 2017	Offset Printing	SIGA

	CAYm2(2016-2017)					
S.No.	Date	Name of the course	Name of the Company/Industry			
1.	22 to 27 Aug 2016	Packaging Pre- Media	SIGA			
2.	05-Dec – 10 Dec 2016	Graphic Designing (Illustrator, Photoshop)	SIGA			
3.	05-Dec – 10 Dec 2016	Layout and Pagination Art	SIGA			
4	05-Dec – 10 Dec 2016	Arts and Crafts	SIGA			
5	05-Dec – 10 Dec 2016	Textile Design and Printing	SIGA			
6	05-Dec – 10 Dec 2016	Offset Printing	SIGA			

The department invites experts from industry for lectures for the students and staff.

- The topics are identified to fill the curricular gaps and the eminent speakers on that domain are invited from reputed institutions, industries and leading MNC.
- Circular is sent to the students and copy is put in notice board.
- Feedback is collected from students and speakers.

CAY(2018-2019)							
S.No	Date	Торіс	Guest Details				
1	13-Jul- 2018	Costing and Estimation	Mr. Parthasarathy, Production Manager,				
			SIGA Press				
2	23-Aug- 2018	Color Management	Mr. Panthalaselvan, G7 Expert, Pressman Solutions Ltd. Chenna				
3	05-Sep- 2018	Design and Layout – Graphic Designing	Mr. Franklin, Senior Graphic Designer and Mr. Joy, Principal designer from Times of India				
4	13-Oct- 2018	Art of Designing	Mr. John Bosco, Creative Head, Bangalore				
5	15-Oct-2018	Immigration and Study Abroad	Mr. Suresh Babu				
6	14/12/2018	"Be Industry-Ready" and mock interview	Mr. Rob Thangadurai				
7	24 Jan 2019	Satellite Launch Vehicle	ISRO Senior Scientist and Project Director of Hypersonic Wind Tunnels Project Dr. DS Anthuvan				
8	19 Dec 2018	Financial Awareness to promote financial literacy	ICICI bank's "Disha Trust				
	1	CAY m1(2017-2018)					
S.No.	Date	Торіс	Guest Details				
1.	14-07-2017	Colour management	Mr. Francis, Studio 3 Pre Press Services,				
			Chennai.				

Guest Lecture Summary with Industrial Experts:

2.	18-08-2017	Packaging Reprographics and customer Support	Mr. Croyden, Schawk India
3.	22-09-2017	Offset machine Printing	Mr. Prakash, Stampford Press, Singapore
4.	19-01-2018	Binding and Converting	Mr. J.J Fredrick Govt. Press, Madurai
5.	09-02-2018	Packaging Technology	Mr. Marshall, Research Scholar, Anna University

	CAYm2 (2016-2017)						
1	10-06-2016	Packaging Machinery and maintenance	Mr. Marshall, Research Scholar, Anna University				
2	15-07-2016	Packaging Reprographic	Mr. Daniel, Schawk India				
3	12-08-2016	Infographics	Mr. Franklin, Times of India				
4	27-01-2017	Web Offset Machine Printing	Mr. Manoj, The Hindu News Paper, Chennai				

MOU DETAILS:

• Department has signed MoU with below mentioned industries for providing industry related

seminars/guest lecturers/workshops and placement drive.

Academic	Name of the	Saana	Outcome	
Year	Organization	Scope	Gutcome	
		3 D Printing	3D Design and	
2017-2018	NexGen 3 D Printing Pvt. Ltd		Prototyping in	
			Packaging	
			Design	
2018-2019	Jai Academy	Textile Printing	Textile Design and Printing	

Impact analysis of industry institute interaction and action taken thereof:

✤ Feedback is obtained from the students and based on the feedback the industries are assessed. The in-plant training coordinator encourages undergoing in-plant training or internship in their pre-final year vacations. This will enable the students

- * To gain hands-on experience in implementing whatever they have learnt in their curriculum.
- ✤ To train themselves on the state of the art equipments and standards used by the industries.
- ✤ To present themselves as complete professionals, when they go for placements.

Arranging for In-plant training / Internship

- Students will choose a domain that they come across in their academia and find the industries available on that particular domain which provides training.
- Students will then approach the department for getting approval.
- The college will issue the necessary documents like a bonafide certificate and request letter to the concerned industry.
- After the consent of the industry the students will attend the training program in the respective industries.

Impact Analysis of Industrial Training

- Assessment will be based on type of industry, objectives; number of students participated, relevant area of training, documented visit report.
- Analyzing the likely impacts of the training on the performance of the student through detailed interaction with students.

Student Feedback on Initiative

- Feedback is obtained from the students regarding the training.
- Taking necessary actions with regard to the feedback given by the students who underwent training.

Details of the training undergone:

CAY(2018-2019)

Sl.No	Name of the Student	Class	Company Name	Duration of Training
1.	ALL Final Year Students	III Year	2Ad Pro, Studio 3, Lasso and Marquee, Scan Trans Pvt.Ltd, Rathna Offset, Chennai Micro Prints, VS Printograph, Kohinoor Printers,	7 weeks

CAYm1(2017-2018)

Sl.No	Name of the Student	Class	Company Name	Duration of Training
1.	ALL Final Year Students	III Year	2Ad Pro, Studio 3, Lasso and Marquee, Scan Trans Pvt.Ltd, Rathna Offset, Chennai Micro Prints, VS Printograph, Kohinoor Printers,	7 weeks

CAY m2(2016-2017)

Sl.No	Name of the Student	Class	Company Name	Duration of Training
1.	ALL Final Year Students	III Year	2Ad Pro, Studio 3, Lasso and Marquee, Scan Trans Pvt.Ltd, Rathna Offset, Chennai Micro Prints, VS Printograph, Kohinoor Printers,	7 weeks

Industrial Training / Tours for Student:

Initiatives

Industrial visit is a part of the professional courses, during which students visit companies and get insight on how companies work and also useful information related to the practical aspects of the course which cannot be visualized in lectures. With an aim to go beyond academics, these visits are arranged to develop the insights of the

students – attaining practical knowledge and their theoretical applications thereof.

- Developing contacts, collecting the addresses of the Industries (with the phone numbers) planned for the Industrial Visit.
- Prepare and send the letters approved by the HOD requesting the Industry concerned to grant permission mentioning the date / time and number of students accompanied by the staff from the department concerned.
- Follow-up with the industry through telephone to confirm their acceptance for Industrial Visit on the mentioned date and time or convenient date is provided by the Industry and requesting them to send permission letter.
- After receiving the permission letter, a letter is addressed to the transport department through HOD and Principal requesting them for organizing of college bus on the permitted day to take the students for Industrial Visit. Alternately outside transport is arranged with the approval of HOD/Principal.
- On the day of Visit, accompanying staff are provided with the Nominal roll number and names of the students for the Industry reference. Staff and students to carry ID Cards.
- On return to the college after the IV, the students are asked to submit a report on visit.

Sl.No	Name of the Company Visited	Class	Date of Visit
1.	VS Printograph	II	18 June 2018
		Year	
2.	Kohinoor Printers	III	23-July-2018
		Year	
3.	Best Lables	II Yr	20-Aug-2018
4.	Chennai Micro Print	III Yr	23-Sep-2018
5.	Prakash Print	III Yr	28-Jan-2019
6.	Label Kingdom	II yr	20-Feb-2019
7.	Rathna Offset	III Yr	10-Mar-2019

Industrial Visit Details

CAY (2018-2019)

CAYm1(2017-2018)

S.No	Name of the Company Visited	Class	Date of Visit
1.	Chennai Micro print	III Year	09 June 2017
2.	ITC Printers and Pvt. Ltd	III Year	14-July-2017

3.	Pearl Printer	II Yr	18-Aug-2017
4.	Ranson Packaging	III Yr	22-Sep-2017
5.	Bharani Printers	III Yr	19-Jan-2018
6.	Sakthi Scanners	II yr	23-Feb-2018

CAYm2(2016-2017)

S.No	Name of the Company Visited	Class	Date of Visit
1	Label Kingdom	III	11 June
	C C	Year	2016
2	Pearl Printer	III	09-July-2016
3	Chennai Micro print	Year II Yr	19-Aug-2016
			17 Sec 2016
4	Kohinoor Printers		17-Sep-2016
5	Bharani Printers	III Yr	21-Jan-2017



2.2.6. Information Access Facilities and Student Centric Learning Initiatives

(Availability of ICT facilities, e-learning facilities, utilization; initiatives to ensure students learning through ICT)

- **Department Library:** The department has books on all the subjects related to the curriculum and also some books which will help them gain extra knowledge. These books are issued to the students.
- Access to other Libraries in Campus: The students also have access to libraries from other college in the campus.
- Videos: Multimedia has many kinds of data such as text, audio, images, animation, video and interactive content. These make the learning complementary with the existing tools. With video, the students has more control over the information they receives and it provides additional opportunity for deeper learning by being able to stop, rewind, fast- forward, and replay content as many times as needed.
- **PPTs**: PPT can help teachers to teach a subject point wise so as to make the learning more efficient. Power Point has become very popular because it's easy to learn, widely available, easy to understand the subject.
- **CDS/DVDS:** CD/DVDs contain large amount of data in the form of video, documents and audio. Students can take back up from computer and store it in DVD.
- **Transparencies:** Transparencies are mainly used for drawing figures which are then placed on an overhead projector for display.
- E-Notes: e Notes helps students to complete assignments and study for exams. E notes are sent to the students by emails.
- **II. Website-Notes**: Websites includes educational video tutorials, instructional lectures, do-it yourself guides, self-help tutorials, interactive presentations, animated explanations and

many more. It helps students to develop learning skills.

III.

III.	Es all'Alor	Veen	Subjects	Cturd on ta	Domouly
Sr.	Facilities	Year	Subjects	Students	Remark
No				Benefitted	
1	Multimedia/ Flash/ Video	III Year I Year	Communication Eng. NITTTR NITTTR Science	All TY Students All FY Students	Shown to students during lectures
2	PPTs	III Year II Year I Year	Packaging Technology Printing Processs- Heidelberg Science for Printers	All TY Students All SY Students All FY Students	Shared with Students
3	CD/DVD	III Year	Communication English – Cambridge Universtiy - BULATS	All TY Students	Shared with Students
		II Year	Heidelberg Videos of Offset Machine Printing	All SY Students	
		I Year	NITTTR – Mathematics	All FY Students	
5	E- Notes	III Year	Press Management	All TY Students	E Notes are
		II Year	Print Layout and DTP	All SY Students	mailed to the students by
		I year	Science for Printers	All FY Students	faculty
		II Year	Image Processing	All SY Students	
		III Year	Digital Pre Press	All TY Students	
7	Websites			All Students	Internet facility is made available to all students on all PCs

2.2.7. New Initiatives for embedding Professional Skills

(Initiatives for developing specialized skill development programs including communication, professional and core employability skills to enhance employability)

For developing specialized skill development including communication, professional and core employability skills, classes on Professional Practices, Development of Life Skills & Entrepreneurship Development are conducted. Professional Practice and Entrepreneurship Development are transdisciplinary academic department focused on flexible work-related learning within higher education.

Professional Practice subject provides a platform to students to undergo activities which will enable them to develop self-confidence.In this subject a student is needs to use the knowledge and skills within a practical environment. Practicing in a professional manner requires that individuals have skills, knowledge, values and attitudes appropriate to their role and responsibility within the setting. In addition, it requires regular reflection upon practice and engagement in supported, ongoing professional development.

Professional Practice is enhanced in several fields-

• **Effective communication** is more than just exchanging information with others. It involves teamwork, decision making, and problem solving. It enables the students to communicate even negative or difficult messages without creating conflict or destroying trust.

It is achieved in several ways-

- Interacting with peers to share thoughts
- Prepare notes on given topic.
- Conducting Seminars
- Conducting Group Discussions
- Guest lectures on Communication Skills
- Preparing report on industrial visits, expert lectures
- Organizing Paper Presentations
- **Industrial training** provided to the students after 4th and 6th Semester helps the students in gaining knowledge. It also allows them to work on real world problem and develops confidence in them.
- **Personality development** means enhancing and grooming one's outer and inner self to bring about a positive change to your life. Each individual has a distinct persona that can be developed, polished and refined. This process includes boosting one's confidence, improving

Communication and language speaking abilities, widening one's scope of knowledge, developing certain hobbies or skills, learning manners. It is achieved in several ways-

- 1. Conducting guest lectures on Personality development
- 2. Organizing Seminars
- 3. Guest lectures on Stress Management
- **Information search**-Everybody can become more effective when it comes to searching of information. Research suggests that metacognitive strategies including planning, monitoring and self-regulating actions could enhance individual search in research database. Students are provided with different topics related to different fields of study.
- **Industrial visits** -Industrial visit has its own importance in a career of a student who is pursuing a professional degree. It is considered as a part of college curriculum.

Industrial visits provide students an insight regarding internal working of companies. We know theoretical knowledge is not enough for making a good professional career. With an aim to go beyond academics, industrial visit provides student a practical perspective on the world of work. It provides students with an opportunity to learn practically through interaction, working methods and employment practices.

Workshops –Several workshops are conducted to improvise students in different aspects such as

Workshops on Entrepreneurship development skills

Workshops on recent ongoing Computer Engineering related topics.

➤ **Mentoring** --Mentoring is to support and encourage people to manage their own learning in order that they may maximize their potential, develop their skills, improve their performance and become the person they want to be. Mentoring is a powerful personal development and empowerment tool. It is an effective way of helping people to progress in their careers and is becoming increasingly popular as its potential is realized.

Counseling is about talking to someone who understands what depression is and what can help. Counselors are professionally trained to work with people on their personal and emotional issues, including depression and suicide. Counseling offers an opportunity to talk confidentially to someone impartial, so students are free to explore your true feelings and be supported without judgment.

2.2.8. Co-curricular & Extra-Curricular

Activities CLUBS AND MOVEMENTS MEDIA CLUB

MOTTO : COME TOGETHER TO COMMUNICATE

OBJECTIVES:

- To emphasize the effect of communication among the students.
- To trigger the innate talents of the students and to prepare a platform to exhibit.
- To be aware and share the awareness among the people to whom we will be having contact.
- To emphasize on the topic of leadership and practice those in a minor level at our college.

SOCIAL SERVICE CLUB

MOTTO : "LOVE TO SERVE, LIVE TO SERVE"

OBJECTIVES:

• Seeks to make our services useful to society, it will promote the ongoing improvement of the well being of the society.

ECO CLUB

MOTTO : STRIVE TOWARDS GREEN

OBJECTIVES:

- To create awareness and sensitivity among individuals to the total environment and other allied surroundings.
- To involve the Eco Club members in action based programs related to environment in the college surroundings.
- To make SIGA campus a plastic-free area.
- To avoid and reduce water wastage and leakage.

PRAYER CLUB MOTTO : TO COME CLOSER TO GOD

OBJECTIVES:

- To encourage the custom of participating in religious service effectively.
- To promote the spirituality within campus.

VOLUNTEER CLUB MOTTO : BE READY TO GIVE HELPING HAND FOR NEEDY

OBJECTIVES:

• Not to become a man of success rather try to become a man of value.

ENTREPRENEUR CLUB MOTTO : WE STRIVE, WE SHARE; WE ARE THE CHANGE WE LOOK FOR

OBJECTIVES:

- To provide awareness and guidance to all aspiring young leaders
- To prepare college students to have the appropriate business insights & entrepreneurial skills
- To cultivate the entrepreneurial skills & values among college studetns, in order to develop knowledge & enterprising graduates.

GAME AND SPORTS

In Don Bosco's system of education, sports and games are a important factors, since they promote a sound physical development, relief from the stress of work, and help effectively in the formation of character.

Hence all the students are expected to take an active part in the games and sports conducted by the

Institute. Prizes and certificates will be awarded to the winners.



Clubs and Movements (Eco Club, Media Club, Prayer Club, Volenteers Club, Entrepreneour Club, Social Club

Dimension	Aspects	Programmes/Activities	Date of the Programmes	Persons Incharge
Education and Culture	Physical Development	Sports & games	 College level FB, VB, BB, Carrom teams will be given daily. Inter Club matches will be conducted during the first semester (FB, VB, BB, & Ko-Ko, Kabadi & Indoor games) Athletics preliminaries and finals to be conducted in the first semester. Tournaments (DB & Marian Months) Sports Day to be conducted in Dec. 2014 Seminar on Substance abuse in Dec. 2014 Seminar on Leprosy awareness and First aid in Jan. 2016 	Sports Coordinator (Mr.Joy Louis) Sports Coordinator (Mr.Joy Louis) Sports Coordinator (Mr.Joy Louis) Principal
	Intellectual Development	Periodic Tests, Exams	Semester Exams Internal Tests Unit Tests Extra Coaching	Vice Principal/ Academic coordinator
		Library	Weekly library hours	Mr. Samraj
		Technical seminars & Industrial visits	Colour Management Seminar – Aug. Industrial visit to Erode (GDC III) Press Visit to	Mr.Ignatius/ Principal Mr.Joy / Vice
		Specialization	Pondicherry (SDC II)	Principal

	1			
			Spoken English/Reading Practice Elocution Practice on weekends Inter Club cultural competitions during Christmas & Pongal celebrations	
	Cultural development		Inter Club cultural competitions during Christmas & Pongal celebrations	Vice Principal
	Personality	Talks /camps /	Daily Assembly talks	SDBs
	development	Seminars	Personality Development seminar & Education to love in Dec. 2014	Fr.Jayaraj / Mr.Einstein
			Winter camp to be organized for 1 st years towards holistic formation.	Vice Principal
	Support to Education	Scholarships & concessions	50 students will be given DB foundation scholarship.	Fr.Rector
			Various Government scholarships is to be procured for 100 students this year	Principal/College office
Evangelization and	Catechesis	Catechism classes	Every day catechism class is taken for the	All SDBs
Catechesis			students. On Feast days and first Fridays of every month Holy Eucharist will be celebrated in a meaningful way.	Vice Principal
		Sacramental opportunities	Sacramental education for all.	Principal
	God	Retreats / Prayer	All the students will	Vice Principal

	Experience	Meetings	have a day of Retreat at Ennore in batches before Christmas	
Groups and Movements	Group Experience	Bosco club Meetings / Competitions	Media club, Eco club, Prayer Cell, Volunteers entrepreneur club and social club will be started in 25, July 2015.	Vice Principal
			Animators of the above clubs will be sent for training programmes at the province level Students will be allowed to take part in	Fr.Manila
			Inter-Institutional competitions.	Principal
			Student Welfare Council is to be more strengthened.	Vice Principal / Animators
			Every Saturday club meetings are conducted under the guidance of the animators.	
Vocational Guidance		Personal Guidance and talks	Rector will meet all the students in batches at least twice in a year (Sep.2015 & Feb. 2016).	Rector
			Demonal courselling of	Fr.Jeyaraj / Mr.Einstin
			Personal counselling of the students to be arranged from Dec. 2014	Principal
			Vocation directors (SDB & others) will be called to address the catholic students	
		Multi skill training & On-job training.	Add-on courses will be conducted during the semester holidays according to the number	Academic Coordinator

		Job placement & Documentation	of takers Industrial visits will be organized in the course of the year. Implant Training will be made compulsory for students at the end of 5th semester Job opportunities will be displayed on the notice board.	Vice Principal Academic Coordinator Principal / Vice Principal
Social Dimension	Social Education	Seminars	Campus Interview will be conducted in Feb. 2016 onwards Political Responsibility of the Young for 1st	Vice Principal Principal
			years – Nov. 2015 Right to Information for 2nd Years – Dec. 2015 Seminar on Human rights for 3rd Years – Dec. 2014 Campus Weekly Cleaning	Principal Principal Vice Principal

Communication Dimension	Media Education	Media Club Meetings	Environment Day & Harmony Day Once in a week	Group In- charge
			Seminar on Media and Youth will be organized for the 1st year in July. 2015	DBICA (Fr.David)
			Screening Value Based Movies Short Film Festival – October 2015	Principal
			Internet Access & Social Networking	