



Best Practices in Sri Sairam Institute of Technology

1. Students mentoring system
2. Skill rack-pee cee software systems
3. AMCAT test for a dream job
4. Teaching – learning process through academic planner
5. Sairam students' bridge course
6. The innovation and entrepreneurship development centre (IEDC)

BEST PRACTICE - 1

1. Title of The Practice:

STUDENTS MENTORING SYSTEM

2. The Context:

Faculty members are allocated to the students from their first year. Mentoring Relationship leads to the career development, role modeling and organizational commitment. It's a unique opportunity to connect with their families, mentors must be supported around the elements of their roles that extend beyond mentor-mentee relationships in order to capitalize more fully on the promise of the intervention.

3. Objectives of the Practice:

Mentoring is a positive developmental partnership, which is driven primarily by the mentee. It offers a reflective space where the mentee can take responsibility for and discuss their development

4. The Practice:



The rationale for Academic Mentoring is to support the professional growth of the individual who is in the early stage of their career and to promote excellence in teaching & learning, research and academic leadership. They can help clarify the Mentee's perspective while bringing an additional impartial view to bear on the issues. Sometimes, when the issues are straightforward and urgent, a Mentor might offer advice or give some direction. Confidentiality, trust, understanding and positive expectation are key to a successful partnership. Frequent counseling leads to Mentors can help highlight issues and to assist the Mentee in planning ways through them. Mentor books are updated with their results, achievements, certifications, attendance, scholarships and project details.

5. Obstacles faced/Problem Encountered:

For many of the mentors, the difficulties related to initial doubts about the role, frustration with the students' attendance and overloading of daily tasks. To address such difficulties, these mentors used external resources and their own life experience and personal way of dealing with situations. This system will be more useful to provide training to continue to screen mentors for suitability and develops techniques for early trouble - shooting should problems be identified.

6. Impact of the Practice/Evidence of Success:

The evidence of success is based on the academic pass percentage result of students in past five years from 2014 to 2019, total number of students got placed in the campus recruitment and number of students received Anna university ranks in last five years. After successful implementation of this practice there is an effective increase in the Pass percentage, the number of Rank holders and massive Placement record.

7. Resources required:

All the staff members are involved in this activities.

8. For further details / Contact Details

Name of the Principal: **Dr. K.Palanikumar**

Name of the Institution: **Sri Sairam Institute of Technology**

City: **Chennai**

Pin Code: **600 044**

Accredited Status: **A+**

Validity Period: **upto 2023**



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BEST PRACTICE - 2

1. Title of the Practice

Skill rack-Pee Cee Software Systems

2. The Context

Getting up high speed internet connection is a challenge. Assigning user id and Password to a group of 2000 students without conflict had some minor issues which were resolved. The main challenge with this software is to convince interdisciplinary students. The mentors repeatedly counseled the students with the importance of learning skill rack and the placement scenario.

3. Objectives of the Practice:

Skill rack is one of the trusted training online portals that offer online Software training for various IT courses & works with a mission to make online software learning easier for all the students across the globe.

To train the Students and faculties in various ranges of technologies.

To provide IT training to fresh learners and professionals

To train the students to crack the aptitude test, group discussion & technical round of interview successfully is not sufficient in the present placement scenario.

Students are well trained in various niche technologies like C, C++, JAVA, PYTHON, .NET, CLOUD and APP DEVELOPMENT.

4. The Practice

The students were given individual user id password to login to the portal where they can practice coding, data structures, algorithms, quantitative, logical, and verbal. They have online tutorial also to clarify all the doubts then and there. They also get more clarifications from the faculty in the lab environment regularly. This will improve the various technology skill set among the students to meet requirements of the changing industrial needs



We can generate the detailed reports of the performance of the students in an extraordinary format like login details of every student, the time consumed, time taken to solve a particular question, test resume count, hint and solution seen, ranking of recent 'N' test, number of test absent, students strength and weakness report and the students activities are monitored and communicated to the respective students individually.

Weekly 2 hrs is allocated for students to clarify their doubts in skill rack. A mentor from CSE/IT Department is allocated during the session of two hours to clarify the doubts of the students. Also one hour is allocated in time table per week for aptitude learning. The students will be given with a set of multiple choice questions in Mathematics which will be guided by a Maths faculty. The students with good score in skill rack will be awarded with batches which will be given weightage during their placements.

5. Obstacles faced/Problems encountered:

Skill rack compiler list out some code related problems which will run with other compilers. Initially it was difficult for the students to identify. The students of Civil, Mechanical and EEE initially found the skill rack platform as very difficult and time consuming. For skill rack clarification one hour was allocated per week in the time table. Based on the request from students end the skill rack hour is extended to two hours per week.

A dedicated system with internet connection must be allocated for a student to perform skill rack. Initially Departments like Civil, Mechanical and EEE were using the Labs of CSE and IT. Later on, a separate Career Lab has been established which is shared by all the Departments. Simultaneous usage of the internet bandwidth created problems at times.

6. Impact of the Practice/Evidence of Success:

Skill rack training is exposed to all Placement Panels. Training & Placement cell functions effectively to upgrade the students with Job opportunities from reputed concerns. Placement cell arranges for Campus Interview with different companies during the Final year of the students. Placement cell has MOU's with different companies which provide Internship to the students. Campus Recruitment process starts at the beginning of final year and continues till the end of that academic year. Students who are not placed in the Campus recruitment process are provided with off campus interviews conducted at other Colleges.

1) Entrepreneurship

Students responded effectively to the emerging challenges and opportunities both at national and international level relating to SMEs and microenterprises. Every year five innovative student projects were initiated and funded by IEDC for innovative product development. Entrepreneurship club is created in the college to foster culture of entrepreneurship amongst students

S.No	Details of the program	No. of students benefited
1	Three days Entrepreneurship Awareness	III year B.E & B.Tech students



	Cam p (EAC) – sponsored by entrepreneurship development institute (EDI – India) - 26/09/18 to 28/09/18	from CSE=92
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2) Co curricular Activities

Students participated in intercollegiate symposiums under coding events, hackathons, talkathons and Professional Bodies.

7. Resources required:

One system administrator, three technicians to maintain the stand alone systems.
Skill rack Pee-Cee software.

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BEST PRACTICE - 3

1. Title of the Practice:

AMCAT Test for a dream job

2. The Context:

AMCAT allows both companies and job applicants to solve this problem in a quick and efficient manner.

By having a standardized aptitude test (i.e. a common aptitude test taken by millions of candidates), scores can be quickly compared across multiple candidates allowing recruiters to quickly generate a shortlist of good candidates.

By performing well in the AMCAT, a good candidate can stand out amongst their peers.



AMCAT is inherently fair since every test taker is evaluated on same parameters. Hence hiring happens strictly on merit.

3. Objectives of the Practice:

In this age of increased competition, companies and candidates face a common problem: Thousands of candidates apply for every job opening which can create a daunting situation.

How can companies quickly identify talented candidates? Manually going through thousands of resumes or conducting interviews requires a lot of time and effort.

How can good candidates, highlight themselves to companies? Showing a college mark sheet or a resume is not useful since companies can't really differentiate using these.

4. The Practice:

The AMCAT is a computer adaptive test which measures job applicants on critical areas like communication skills, logical reasoning, quantitative skills and job specific domain skills thus helping recruiters identify the suitability of a candidate.

While most aptitude tests only measure a test taker's verbal comprehension and reasoning abilities, the AMCAT additionally evaluates personality traits and domain skills, thus becoming an ideal test to match jobs to candidates.

Post the test, AMCAT also helps match candidates with suitable jobs based on their performance on the test.

AMCAT's comprehensive feedback report helps you identify your strong and weak areas so that you can work to improve in highlighted areas or apply for specific industries/jobs where your strengths are better suited.

The AMCAT is fast emerging as an industry benchmark with 700+ companies using it as a compulsory testing mechanism for entry level roles. We work alongside industry leading names like Accenture, Snapdeal, Axis Bank, Tata Motors, ITC and many more. Our client list covers multiple industries like IT Services, Banking & Financial Services, Automobiles, Telecom etc.

There are thousands of small companies which are looking for good talent and provide great opportunities for growth. AMCAT works with more than 500 small and medium enterprises, helping you identify opportunities in companies which you would not typically approach.

Apart from industry, leading job search providers like LinkedIn and Monster.com accept the AMCAT test as an employability certification.

Some key numbers about the AMCAT:

Since inception, more than 2 million students have successfully taken the AMCAT.

Every month, more than 1.5 lakh interview calls go out based on a student's AMCAT score.

5. Obstacles faced/Problems encountered:

Major problem is based on the request from students end that working hour to be extended to two hours per week.

6. Impact of the Practice/Evidence of Success:



AMCAT test & training skill is exposed to all Placement Panels. Training & Placement cell functions effectively to upgrade the students with Job opportunities from reputed concerns. Placement cell arranges for Campus Interview with different companies during the Final year of the students. Placement cell has MOU's with different companies which provide Internship to the students. Campus Recruitment process starts at the beginning of final year and continues till the end of that academic year. Students who are not placed in the Campus recruitment process are provided with off campus interviews conducted at other Colleges.

7. Resources Required

A dedicated system with internet connection must be allocated for a student to work seamlessly. Initially Departments like Civil, Mechanical and EEE were using the Labs of CSE and IT as there was no separate computer labs for these departments.. Later on, a separate Career Lab has been established which is shared by all the Departments. Simultaneous usage of the internet bandwidth created problems at times.

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BEST PRACTICE - 4

1. Title of the Practice

Teaching – Learning Process through Academic Planner

2. The context

The syllabus coverage in some cases is being hurried and towards the end of the semester where information are being forced at once. This slow coverage initially and hurried coverage later should be avoided giving enough time to student in comprehending the topics and assimilating the facts. It has become pertinent for some teachers to adopt to the latest pedagogic styles and include ICT in class room teaching.

3. Objectives of the Practice

To ensure the completion of syllabus according to the academic planner of each department.
To encourage teachers to adapt to technological advancements including ICT in class room teaching.

4. The practice

Academic planner along with the calendar of events is for information to students. The teaching – learning committee along with the heads of different departments monitor the pace of coverage of the syllabus. Head of the institution review this once in a month. Informal feedback is obtained from students regarding the content delivery by different teachers through class committee meetings. Frequent assignments, tests and evaluation are conducted to improve performance in the semester – end examinations. Class rooms are made ICT ready and many departments have the necessary tools for handling the class room teaching with the help of ICT. Computer science department staff and programmers train the teachers in the use of Power Point Presentations, browsing the internet for useful resources, uploading content on the college website, use of google docs, google classroom for information sharing, etc.

5. Obstacles faced/Problems encountered:

Development of animation based power point presentations in teaching, particularly in advance engineering subjects, has been hindered due to the want of in – house technical expertise. The demand for ICT resources is increasing which may dampen the spirit of technology adoption by teachers.

6. Impact of the Practice/Evidence of Success



Some of the teachers have adopted modern pedagogic styles and ICT in their classes. Some of the notes are uploaded on the college server for the access of the students. Staff members use google class room for speedy access to students assignments, etc. Paced and timely completion of syllabus is achieved by all the staff members. Increased attendance in the classes. Improvement in results.

7. Resources Required:

Existing manpower and equipments are utilized for this.

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BEST PRACTICE- 5

1. Title of the Practice:

Sairam Students' Bridge course

2. The Context:

Students of the college come from various backgrounds (socio-economic disparity) and with different abilities (Rural and Urban area). To minimize the differences in their performance the college decided to give extra lectures and teaching classes to the needy before the semester starts. These programmes are not enhance the students capability help garnering the benefits of these courses.

3. Objectives of the Practice:

All the departments in the college involve actively in improving the overall results and academic excellence of our students. Coaching classes are taken beyond the classroom teaching hours. The aim is to improve collectively, the achievements and performance of students. These programmes are primarily aimed at slow learner students to have a one-to-one interaction with teachers. They are also meant to train and equip students to face out-of-the-curriculum exams and tests. .

4. The Practice:

To alleviate the performance differences among students the following programmes were initiated: basic mathematics, English and Physics. Those students who under-perform in regular classes are given remedial teaching classes by teachers. The remedial classes are mainly aimed at UG students of first year and by the second year they have been found to improve significantly. Teachers (mentors) of the college regularly counsel students to understand their backgrounds and living conditions so that they can develop better rapport with students and parents. This has helped teachers to identify underprivileged students and provide better academic and moral support.

5. Obstacles faced/Problems encountered:

Major challenge was to find time-slots for the classes. Even though teachers come early and leave much later after the regular working hours, the time slots for engaging the classes have been difficult to arrange. Most of the students come from remote areas and they cannot attend classes during late hours.



5. Obstacles faced/Problems Encountered:

Major challenge was to find time-slots for the classes. Even though teachers come early and leave much later after the regular working hours, the time slots for engaging the classes have been difficult to arrange. Most of the students come from remote areas and they cannot attend classes during late hours.

6. Impact of the Practice/Evidence of Success:

The College started the bridge course once they understood the problem of various backgrounds (socio-economic disparity) and with different abilities (Rural and Urban area) when there is a gap in the first semester university results. After these bridge courses there is a steep increase in the first semester results on university exams.

8. Resources Required:

Existing staff members are all well trained in this and they are utilized for this.

9. Contact Details

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BEST PRACTICE - 6

1. Title of the Practice



The Innovation and Entrepreneurship Development Centre (IEDC)

2. The Context

Entrepreneurship education is being delivered to greater number of students through a variety of courses, programs, and experiential learning activities at institutional levels. Some of these opportunities are designed primarily to serve engineering students in their departments and colleges, while others are cross-campus, university-wide efforts to serve students from many disciplines. To date, few researchers have examined to what extent differing program models and experiential activities impact students' perceptions of their entrepreneurial knowledge, skills, and self-efficiency.

The Innovation and Entrepreneurship Development Centre (IEDC) is being promoted in our institution globally to develop institutional mechanism to create entrepreneurial culture for engineering students and to foster techno-entrepreneurship for generation of wealth and employment.

3. Objectives of the Practice:

- To act as an institutional mechanism for providing various services including information on all aspects of enterprise building to budding entrepreneurs.
- To create Entrepreneurial culture in the Parent Institution and other institutions in the region and to promote the objectives of NSTEDB, including programmes related to women and weaker sections of the society.
- To inculcate a culture of innovation driven entrepreneurship through student projects.
- To catalyze and promote development of S&T knowledge-based enterprises and promote employment opportunities in the innovative areas.
- To respond effectively to the emerging challenges and opportunities both at national and international level relating to SMEs and micro enterprises.

4. The Practice:

- To organize Entrepreneurship Awareness Camps, Entrepreneurship Development Programmes, Faculty Development Programmes and Skill Development Programmes in the college/institution for the benefit of S&T persons.



- To initiate five innovative student projects each year for new innovative product development.
- To organize Business Plan Competitions every year.
- To guide and assist prospective entrepreneurs on various aspects such as preparing project reports, obtaining project approvals, loans and facilities from agencies of support system, information on technologies, etc.
- To arrange interaction with entrepreneurs and create a mentorship scheme for student entrepreneurs.
- To facilitate creation of entrepreneur's club in each college to foster culture of entrepreneurship amongst students
- To act as a Regional Information Centre on business opportunities, processes, technologies, market, etc. by creating and maintaining relevant data bases.
- IEDCs would also sensitize the management of the institutions regarding the importance of entrepreneurship and integrate their activities with the Host Institutions.

5. Obstacles faced/Problems encountered:

As the students are fully engaged in their day-to-day activities and in their studies, it was difficult for the students to allocate time for research activities

6. Impact of the Practice/Evidence of Success:

ACADEMIC YEAR	NAME OF THE PROGRAMME	DURATION & DATE	TARGET AUDIENCE
CAY (2018-19)	Entrepreneurship Awareness Camp	(3 Days) 26.9.18 to 28.9.18	Students of III CSE

FUNDED PROJECTS:



Academic Year	No of Projects	Project Details	Name of the Student	Guide
CAY (2018-19)	2	1. Security Camera and Door Unlock System	Manoj Kumar, Gokula Krishnan, Aakash, Yogendran (III CSE A)	Ms.K.Sathyabama
		2. Navigation System for Visually Challenged	Pruthvi Raj, Praveen Daniel, Saikarthick (III CSE A)	Ms.D.Roopaa

7. Resources Required:

Existing staff members are utilized for the IEDC cell. Funds from Government (DST) and Management is used

8. Contact Details

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BEST PRACTICE - 7



1. Title of the Practice

Green Initiative for green environment

2. Objectives of the Practice

- To inspire the student community to act on behalf of global preservation.
- To educate young students about climate changes, global warming crisis and sustainable living practice.
- To change the behavior of peers and adults to begin “Go Green” in their day to day lives.
- To generate less waste.
- To educate the students community on eco friendly options
- To encourage all to go paperless as much as possible

3. The Context

Implementing the 5-R principle (Reduce, Reuse, Recycle, Replace and Reject) throughout our college campus with the Engineering Operation to sustain a green environment in order to keep our campus as a “Go Green” basis.

Formed Agriculture and farming club with a set of students to create awareness for the need to protect the environment and to enhance public action through its strong environment field.

4. Evidence of Success

- Roof top solar power plant is commissioned in our department.
- Reverse Osmosis plants are installed and treated waste water from RO plants is used to water the plants in our campus.
- Sprinklers are used throughout gardens to prevent water wastage.
- Energy Efficient lighting system is established through LED bulbs.

5. Green Practices

- Battery vehicle is used for movement inside the campus
- Smoking free campus
- Plastic free campus
- Paperless communication has been introduced for group communication such as e-mail, whatsapp

Dustbins are available to separate recyclable and non-recyclable waste product throughout the cabins

Organic Garden is maintained inside the campus

Conducting various awareness programs to enhance the “Go Green” title such as tree plantation

Adapted environmental science subject as mandatory for the students

6. Awareness Programs



Plastic awareness rally dated on 17.9.2019





Swachh Bharath Abhiyan dated on 10.07.19



Organic Vegetables from our campus dated on 10.10.2020

7. Problems Encountered and Resources Required

In the case of Organic products, problems encountered are exactly the areas where you would not find clean farmland to produce organic vegetables. But our management has made a certain framework to boost organic farming and to promote the same to student's community through awareness programs

An adequate and suitable crops based on farmland were discussed with agricultural and farming clubs to get knowledge of how much water and nutrition needs to be provided to the plants for effective production and high yield and also discussed about modern irrigation such as drip and sprinkler to decide what best for your crops.

8. Notes(Optional)



BEST PRACTICE 8

1. Title of the Practice

Standardized procedures for periodic quality checks of Teaching – Learning

2. Objectives of the practice

The objectives of the intended outcomes of the best practices are:

- To ensure standardized quality learning and teaching experiences across all courses and programs and across differed modes of delivery
- To improve student's learning experiences and outcomes
- To identify and address professional development needs.



- To provide staff with reliable, consistent and timely evidence of the quality of their teaching and student learning which may be used in deciding pay incentives/promotion processes

3. The context

To meet the challenge of promoting innovativeness of teachers, the best way was found to be insisting on documentation of individual teaching plans/lessons which in turn help to identify the most effective methodologies /approaches that can be shared with others who are not very successful in their teaching.

Senior faculty or sometimes even the youngest faculty coming from diverse backgrounds like industry etc., explore alternative pedagogies or adapt student-support to varied student profiles and pedagogical competencies. Their alternative teaching methodologies can serve as training models to other teachers.

In the context of teachers moving towards greener pastures / IT Sectors, the need for adopting standardized procedures was deeply felt as transition becomes smooth when there is a switch of teachers as the former teacher's records becomes a ready reference for the new teacher.

Through constant checks of teacher's documents which include their unit planners, academic records, teaching dairies, monthly appraisal etc., the institution finds scope to identify areas of deficiencies and also take up appropriate FDP programmed for the betterment of their professional effectiveness and also for the quality enhancements of the academic programmed.

4. The Practice

The procedure which constitutes the implementation of the practice is as follows:

- The institution has a meticulously organized and clearly planned teaching, learning and evaluation schedule, well integrated into the total institutional scheme. At the end of each academic year, the management holds consultations with the faculty and the examination section to plan the Almanac for the forthcoming academic year
- The course outlines and the course schedules are drawn well ahead of the course commencement. Each faculty of our department has an individually drafted unit planner, which reflects how each unit is taught by indicating the time frame along with a mention of methodologies/ references used and modes



of evaluation practiced. The course outlines are spelt out to the students by the course teacher in the orientation session.

- Self – appraisals and Monthly appraisals, submitted by the individual teachers gives a clear indication of the teachers’ contributions in various categories - academic, administrative and extension activities. Teaching dairies which have lesson plans of the topics handled that week are meticulously maintained by the individual teachers.
- The Head of the department ensures the effectiveness of the process by weekly checks of the teaching diaries, academic records, monthly appraisals and syllabus completion statements submitted by the faculty. The effectiveness is further ensured through cross verification by the head of the institution.
- The teaching- learning process is continuously reviewed by the Principal by taking into account the feedback given by the students.
- Departmental meetings are conducted thrice in a semester and whenever needed. The minutes are documented and signed by Principal.
- Result analysis is submitted by the individual faculty. The result analysis of each department is submitted to the Principal after each semester.
- Syllabus completion statements are also periodically submitted by the individual faculty in order to ensure timely completion of the syllabus
- Feedback is taken from the students at the end of ever semester for faculty

5. Evidence of success

Effective teachers develop productive relationships with their students – they get to know them and take a particular interest in their overall development and progress. Thus the regulatory mechanism of timely checks on teacher quality has the double advantage of improving not only teacher but also student performances.

6. Problem Encountered and Resources required

Most of the students are faced trouble to improving performance in examination. Those students were identified through class committee and making clear picture where they were actually logged is a special task. So the staffs have to take care of these particular students by making proper class arrangement in weekends.



Sai

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MHRD NIRF ranked Institution

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RECORD OF ATTENDANCE AND ASSESSMENT

From : JUNE 2019 To : NOV 2019

Branch : Civil Engineering

Subject : Water Supply Engineering Sub. Code : ES201

Name of the Teaching Staff : G. Deep Kumar

	End of 1st Month	End of 2nd Month	End of 3rd Month	End of Semester
Staff	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
H.O.D.	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
Principal	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

Approved by AICTE, New Delhi and Affiliated to ANNA UNIVERSITY, Chennai

COURSE PLAN

UNIT No. & TITLE : 2 Water Supply Engineering - Sources of Water

S.No.	Portions to be covered	Books Refered	Page No.	Date Planned	No. of Hours Required	Cumulative Hours	Teaching Methodologies (SB, PPT, OHP, etc.)	Date Engaged
1.	Public water supply system	S.K. Gang	1-21	20/6/19	5	5	SB	20/6/19
2.	Storage reservoir & Dam	"	21-42	24/6/19	5	10	SB	25/6/19
3.	Reservoir characteristics	"	21-42	25/6/19	4	14	SB	25/6/19
4.	Reservoir outlet	"	7-12	22/6/19	5	19	SB	22/6/19
5.	Characteristics	"	21-42	22/6/19	5	24	SB	19/6/19
6.	Water quality standard	"	21-25	20/6/19	3	27	SB	20/6/19

Total Hours Planned : 29
 Signature of the Faculty : *[Signature]*

Total Hours Taken : 23
 Signature of the HOD : *[Signature]*



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COURSE PLAN

UNIT No. & TITLE: 2. CONVEYANCE FROM SOURCE

S.No.	Portions to be covered	Books Referred	Page No.	Date Planned	No. of Hours Required	Cumulative Hours	Teaching Methodologies (BB, PPT, CHP, etc.)	Date Engaged
1.	Potable structures	S.K.Gang	200-210	3/7/19	1	1	BB	25/7/19
2.	Pipes & conduits	"	211-220	4/7/19	1	2	BB	26/7/19
3.	Hydraulics of pipes	"	211-220	5/7/19	2	4	BB	27/7/19
4.	Laying, bedding & testing of pipes	"	221-227	10/7/19	2	7	BB	7/8/19
5.	Appurtenances	"	228-229	11/7/19	1	8	BB	8/8/19
6.	Pumps	"	230-236	12/7/19	2	9	BB	9/8/19

Total Hours Planned: 9

Total Hours Taken: 10

Signature of the Faculty: *[Signature]*

Signature of the HOD: *[Signature]*

COURSE PLAN

UNIT No. & TITLE: 3. WATER TREATMENT

S.No.	Portions to be covered	Books Referred	Page No.	Date Planned	No. of Hours Required	Cumulative Hours	Teaching Methodologies (BB, PPT, CHP, etc.)	Date Engaged
1.	Flint operation & process	S.K.Gang	211-219	17/7/19	1	1	BB	16/7/19
2.	Filtration	"	220-221	18/7/19	1	2	BB	14/8/19
3.	Disinfection	"	222-223	19/7/19	1	3	BB	21/8/19
4.	Sedimentation & tank	"	224-225	19/7/19	2	5	BB	22/8/19
5.	Sand filter	"	226-227	20/7/19	2	7	BB	24/8/19
6.	Disinfection & chlorination	"	228-229	21/7/19	1	8	BB	6/9/19
7.	Fluorination & hardening	"	230-231	21/7/19	1	9	BB	11/9/19

Total Hours Planned: 9

Total Hours Taken: 9

Signature of the Faculty: *[Signature]*

Signature of the HOD: *[Signature]*



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UNIT No. & TITLE: 4. ADVANCED WATER TREATMENT

S.No.	Portions to be covered	Books Referred	Page No.	Date Planned	No. of Hours Received	Cumulative Hours	Teaching Methodologies (BB, PPT, OHP, etc.)	Date Engaged
1.	Adsorption	S.K.Padg	520-525	1/8/19	2	1	BB	12/9/19
2.	Iron & Manganese Removal	"	527-528	2/8/19	1	2	"	12/9/19
3.	Dechlorination	"	526-527	3/8/19	1	3	"	13/9/19
4.	Desalination	"	511-520	7/8/19	1	4	"	13/9/19
5.	Water softening	"	505-520	8/8/19	2	5	"	18/9/19
6.	Desalination	"	505-536	9/8/19	2	6	"	18/9/19
7.	Membrane Systems	"	505-536	14/8/19	1	8	"	20/9/19
8.	O.S.H.	"	527-528	15/8/19	1	9	"	25/9/19

Total Hours Planned: 9

Total Hours Taken: 9

Signature of the Faculty

Signature of the HOD

COURSE PLAN

UNIT No. & TITLE: 5 WATER DISTRIBUTION & SUPPLY

S.No.	Portions to be covered	Books Referred	Page No.	Date Planned	No. of Hours Required	Cumulative Hours	Teaching Methodologies (BB, PPT, OHP, etc.)	Date Engaged
1.	Requirement of Service pressure	S.K.Padg	579-574	16/8/19	1	1	BB	26/9/19
2.	Network Design	"	616-636	21/8/19	2	3	"	24/9/19
3.	Computer Application	"	616-636	23/8/19	1	4	"	27/9/19
4.	Apparatuses O.S.H.	"	636-662	29/8/19	2	5	"	3/10/19
5.	Leak detection Design of water supply in buildings	"	616-660	29/8/19	1	7	"	4/10/19
6.	House service connection	"	666-660	30/8/19	1	8	"	4/10/19
7.	Systems of Plumbing of floors	"	616-660	30/8/19	2	9	"	5/10/19

Total Hours Planned: 9

Total Hours Taken: 9

Signature of the Faculty

Signature of the HOD



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RECORD OF CLASS WORK			
Date	Period	Topics Covered	Initials
20/6/19	3	Introduction <u>Unit-1</u>	SD
21/6/19	1,7	Public water supply	SD
26/6/19	1	Design Period	SD
27/6/19	3	Demand	SD
29/6/19	1,7	Population forecasting	SD
17/7/19	1,3	Population forecasting	SD
18/7/19	3	Source of water	SD
19/7/19	1,7	Characteristics of water	SD
24/7/19	7	Water quality standards	SD
27/7/19	3	Intake structures	SD
27/7/19	7	Pipes & conduits	SD
27/7/19	7	Breakage design	SD
01/8/19	3	Hydraulics of pipe	SD
2/8/19	1,7	Hydraulics of pipe	SD
7/8/19	1	Laying, Joints & Resting of pipes	SD
8/8/19	3	Pipe Appurtenances	SD
9/8/19	1,7	Pumps <u>Unit-2</u>	SD
14/8/19	1	Unit operation of Pumps	SD

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RECORD OF CLASS WORK			
Date	Period	Topics Covered	Initials
16/8/19	1,7	Flash mixes	SD
21/8/19	1	Floculation	SD
22/8/19	3	Sedimentation tank	SD
23/8/19	1,7	Basins - Circular	SD
27/8/19	3	Basins - Rectangular	SD
30/8/19	7	Filtration	SD
6/9/19	3	Slow sand filters	SD
6/9/19	1	Rapid Sand filters	SD
4/9/19	7	Disinfection	SD
11/9/19	1	O ₃ M. <u>Unit-3</u>	SD
12/9/19	3	Aeration	SD
12/9/19	7	Iron & Manganese Removal	SD
13/9/19	7	Softening	SD
13/9/19	7	Deminceralisation	SD
19/9/19	1,3	Water softening	SD
20/9/19	7	Membrane desalination	SD
25/9/19	1	Membrane system design	SD
26/9/19	3,4	Requirement of service reservoir	SD
27/9/19	1,7	Network Design, Computer Application	SD



BEST PRACTICES: 9

1. Title of the Practice

Hands on training in Total station surveying

2. Objectives of the Practice

The objectives/intended outcomes of this best practice are:

- To give a complete picture on the basics of modern surveying trends and its applications in planning, construction and architectural areas
- To understand the various functions of total station
- To gain the knowledge on application of total station
- To have a practical approach for create a detailed topographical maps with contours

3. The Context

The planning and design of all Civil Engineering projects such as railways, highways, tunneling, irrigation, dams, reservoirs, waterworks, sewerage works, airfields, ports, massive buildings, etc. are based upon surveying measurements. During execution of the project of any magnitude is constructed along the lines and points established by surveying.

The measurement of land and the fixation of its boundaries cannot be done without surveying. The economic feasibility of the engineering feasibility of a project cannot be properly ascertained without undertaking a survey work.

4. The Practice

The procedures which constitute the implementation of the practice are as follows:

- The course outlines and the course schedules are drawn well ahead of the course commencement. Each faculty of the department has an individually drafted unit planner, which reflects how each unit is taught by indicating

the time frame along with a mention of methodologies/ references used and modes of evaluation practiced. The course outlines are spelt out to the students by the course teacher in the orientation session.

- Choosing one-to-one training for all the students in surveying which is advantages not least of which is being tutored privately by an expert and having the course content customized to you own specific needs.

5. Evidence of Success

Students got some opportunity after learning this course, through the trainer in semester holidays. In these period they are involved in various activities like field works, preparation of field map and generation of contour map.

6. Problem Encountered and Resources required

Some of the students were troubled to clear interview due to lack of practical knowledge. In order to achieve and gain practical knowledge, it is mandatory to attend internship programme and implant training. All the mentors have to take care of these students by referring some reputed industry to participate these type of event.





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