

Standard Operating Procedure for JES, Jharsuguda

About the Institution: **Jharsuguda Engineering School** is a premier Government Engineering School of western Orissa established in the Year 1955. The institute is control by the Director of Technical Education and Training, Orissa, under the Skill Development & Technical Education Department, Govt. of Orissa. The institute imparts technical education in three years Diploma Level programmes in Engineering & Technology as approved by AICTE. The institute has excellent infrastructures in terms of buildings, equipment, qualified and experienced faculty and a vast campus of 78.025 acre. It has the advantage of being situated in the vicinity of a supportive industrial cluster.

# It offers Seven Diploma Programs -

Sl No	Name of the Programme	Entry Qualification	Intake Capacity
1	Diploma in Civil Engineering	10 <sup>th</sup>	90
2	Diploma in Electrical Engineering	10 <sup>th</sup>	90
3	Diploma in Mechanical Engineering	10 <sup>th</sup>	120
4	Diploma in Electronics &  Telecommunication Engineering	10 <sup>th</sup>	30
5	Diploma in Information Technology	10 <sup>th</sup>	30
6	Diploma in Computer Engineering & IOT	10 <sup>th</sup>	30
7	Diploma in Mechatronics	10 <sup>th</sup>	30

<sup>\*</sup>All courses are recognized by AICTE and are offered according to the syllabus prescribed by the State Council of Technical Education & Vocation Training, Odisha.

#### Vision:

<sup>\*</sup> Pass in +2 Science Examination with PCM/+2 Vocational (2 years course) in any Engineering trades / 2 years ITI in Engineering Trade or COE Trade with pass in HSC examination can take admission to 3<sup>rd</sup> Semester directly under lateral entry.

To emerge as one of the Nation's finest institutions of higher learning in the field of technical education to develop professionals who are technically competent, ethical & environmental friendly for betterment of society.

#### **Mission:**

- I. To provide state of the art infrastructure and vibrant environment conducive to quick
   & qualitative learning through excellent teaching and guidance of dedicated faculties.
- II. To provide exposure to industry through suitable Institution-Industry-Interaction programs to enhance employability.
- III. To provide platform for development of personality traits like professional attitude, Communication Skills etc. to produce competent technocrats.

The institution being a State Government governed institution, it follows the rules of the State council of Technical Education, Odisha in respect of Academic activities. All the regular faculties are appointed as per OTE&Ts cadre 1985 rules. Guest faculties and Instructors are engaged with due permission from the Governing body. The payment of salary is done as per the State Government guideline. The budgetary allotment is made by the State Government of Odisha. The institution also receives central assistance & funds under different schemes like OMBARDC, DMF time to time which is being audited and monitored by different state government agencies.

However few of the policies implemented by the institution are listed in the document.

### **ADMISSION RULES**

Admission process is centrally conducted by DTE&T, Odisha in SAMS portal(https://skill.samsodisha.gov.in/Website/diploma/Diphome.aspx). There is a central admission committee to decide about the admission rules & regulations. All rules and regulations pertaining to Diploma Admission process is mentioned in the above portal.

#### **GENERAL RULES**

#### 1. UNDERTAKING:

Before a student is admitted to the college, he / she and his / her natural or legal guardian have to submit an undertaking in a prescribed form to the effect that he / she or his/her son/ daughter / ward shall abide by the rules of the college. He / She has also to give an undertaking as per the provision of Anti Ragging verdict by AICTE.

#### 2. DRESS CODE:

Every student of the college has to obey the dress code as specified by the College or Institution till completion of the course. Students without proper uniform shall not be allowed to participate in any academic activity like attending classes /appearing at exams / library / lab classes etc.

#### 3. DISCIPLINE:

Students are required to exhibit high degree of discipline. Every student of the college has to abide by the disciplinary rules and regulations of the hostel, institution. He/She shall not involve himself / herself in any objectionable conduct such as violation of Hostel Rules, disobedience of instruction of Hostel and school authorities, immoral conduct or disorderly behaviour including "ragging", at any place. Students are required to show exemplary standards of discipline both inside and outside the Campus. Ragging in any form is strictly banned by law. Any attempt to resort to ragging in any form / physical and mental assault to fellow students shall be severely dealt with. A nodal committee of the institution will consider it and punishment shall be imposed in consonance with Govt. / Court orders.

### 4. VEHICLES:

Entry of 4(Four) wheelers by students is strictly prohibited inside the institute Campus and the two wheelers entering the institute premises should be parked properly in the parking area. Students having valid Driving License and helmet are only allowed to enter in to the institution premises.

## 5. APPLICATION:

Applications should be processed / routed through the HODs or Faculty Coordinators prior to being placed before the Principal.

# 6. USE OF DRUGS/TOBACCO/ALCOHOL is BANNED INSIDE THE CAMPUS.

Disciplinary action will be taken, if a student is caught possessing, distributing or consuming alcohol/drug/tobacco.

#### 7. MAINTENANCE OF DISCIPLINE:

Legal action will be taken against the students for involvement in any form of INDISCIPLINE, RAGGING, VIOLENCE WITH ANYONE INSIDE THE CAMPUS.

### 8. HOSTEL RULE:

As in Annexure I.

#### 9. LIBRARY RULE:

As in Annexure II.

### **ACADEMIC RULES & REGULATIONS**

- (i) The academic calendar published each year by SCTE&VT, Odisha must be followed meticulously without any deviation.
- (ii) There shall be 39 periods per week (6 days per week) and each period must not be less than 55 minutes.
- (iii) No of students in each section of Theory class shall be 60 as per AICTE Norms with additional students from supernumerary category.
- (iv) No of students in a practical group shall be 30 with additional students from supernumery group proportionate to subdivision of 30.
- (v) Names of the teachers should be reflected in the Time Table against respective classes allotted.
- (vi) Students Attendance shall be taken for each subject in the Table. The teacher shall count and mention the number of students Present in the class out of the Total numbers in each class and put his/ her signature below it.
- (vii) The presence in the Attendance Register shall be progressively made in

- Numeric figure and absence should be marked as 'X'.
- (viii) Parents of students having less than 75% attendance both in Biometric device and class attendance register in a month shall be intimated
- (ix) Regarding maintenance of lesson Plan & progress Register the SOP mentioned in notice no 1814 dtd 19/04/18 of Vice Chairman, SCTE & VT is to be followed (portion of the same copied herewith).

#### 4. Lesson Plan and Progress Register:

(i) At the beginning of any semester, each Teacher shall prepare Lesson Plan to be covered on week basis for the entire duration of a semester of each Theory and Practical subject he/she is allotted.

(ii) The Lesson Plan shall have the following Format

Discipline:	Semester:	Name of the Teaching Faculty:		
Subject:	No. of Days/per week class allotted:	Semester From date: To Date:  No. of Weeks:		
Week	Class Day	Theory/Practical Topics		
1st	1st	*		
	2nd			
	3rd			
	4th			
2nd	1st			
	2nd			

- (iii) Lesson Plans must be uploaded in the Institution Website at the beginning of the semester for information of students, parents and other stake holders.
- (iv) Progress Registers shall be maintained for each semester of any Department/Branch which shall cover all subjects(both Theory & Practical).
- (v) Each Teacher at the end of the day has to enter the contents/topics he/she has covered in a subject in the Progress register.

(vi) The Progress register shall have the following Format for each subject.

Date	Topics to be	Topics actually	Points/contents	Signature	of
	covered as per	covered	Discussed (in	Teacher	
	Lesson Plan		brief)	10.00	

# (xi) Internal Examination and register for IA and sessional marks:

(i) 01 number of Internal examination should be conducted for the Theory Papers as per academic calendar. Separate attendance, subject wise shall be taken for students who appear the Internal test and preserved for verification by SCTE&VT.

- (ii) The internal question paper (Full Marks- 20 marks) should be set indicating Bloom's Taxonomy Level (remember, understand, apply, Analyze), and relevant COS. Question paper should cover all COS as mentioned in the course syllabus. The marking pattern of internal questions should comprise of 3/5 numbers of two marks question and two numbers of 7/5 marks questions.
- (iii) Register for I.A marks and sessional marks shall be maintained branch wise chronologically year after year in same register till it is exhausted.
- (iv) At the bottom of each page, under each mark column of each subject, the concerned teacher shall put the signature.
- (v) The evaluation of the sessional mark for individual experiment should be done out of 10 marks comprising maximum 4 marks for Performance during the experiment, maximum 4 marks for Subject knowledge & Viva voce and maximum 2 marks for Record.

Sl No	Regn No	Name	Practical 1 (10)		Practical 2	••••	Total	Avg (10)	
			Perf	Viva	Rec				
			<b>(4)</b>	<b>(4)</b>	<b>(2)</b>				

At the end of semester the sessional register to be updated after mapping to actual mark . The student name in the sessional register are to be arranged in order of their registration number.

(xii) Two numbers of class test( objective type / subjective ) must be conducted in each semester. Analysis must be done for finding out understandability of the students. The questions prepared should be a balance of question of different level (remember, understand, apply, Analyze) Necessary remedial classes shall be taken for this. OMR based test must be conducted for making the students aware of the competitive examinations.

(xiii) The remedial classes should be conducted during the second half of Saturday and beyond class hours and holidays. Prior notice should be given to the students and records of attendance should be maintained.

## (xiv) Semester Examination

Semester Examinations are conducted by the SCTE&VT, Odisha as per its Rules and Regulations(https://sctevtodisha.nic.in/en/administration/)
Students are required to abide by the Rules and Regulations prescribed by the Council from time to time. A student shall bring his / her admit card & ID card to the examination hall during semester examination.

- (xv) The course file is to be maintained by each faculty for each course.
  - It should contain following items.
  - 1. Syllabus
  - 2. Lesson Plan
  - 3. Lecture Schedule(class time table)
  - 4. Class Test Papers
  - 5. Students Sessional exam marks
  - 6. Previous Year Question papers
  - 7. Assignments

#### 8.CO-PO Matrix:

The CO-PO mapping should be done by each course faculty at the beginning of the course in the scale of 1-3, where 1 indicates low relevance, 2 indicates medium relevance, 3 indicates high relevance.

The format for CO-PO mapping is mentioned in Annexure IV for reference.

#### 9. Attainment calculation:

The course attainment will be calculated by the course teacher by calculating Direct Assessment & Indirect Assessment.

Direct Assessment:

Semester Exams conducted by SCTE&VT, Odisha and evaluated by SCTE&VT, Odisha

- \* As the information on performance in semester on each student in individual COs is not available, the Institution/Department has to take that attainment (%marks) for all COs of the course is the same.
- \*Internal Exam Evaluation
- \*The proportional weightage of internal and semester is 20:80
- \*The number of assessment instruments used for internal evaluation is decided by the instructor and/or Department.
- \*Poject/Project Reports
- \*Lab Records

**Indirect Assessments** 

- \*Instructor evaluation Reports
- \*Department performance Report
- \*Employers survey

Set level for calculation of CO attainment is 40%. The reason behind selecting such value for attainment level is that the eligibility for Diploma Engineering is 35% by Govt. Of Odisha. Hence 40% target is minimum level of attainment.

PO attainment and PSO attainment are based on CO attainment.

CO attainment is done through external and internal assessment tools as per SCTE&VT's norms. The course teacher based on CO attainment then prepares PO attainment table proportionately.

Thus, the CO-PO matrix based on CO attainment is prepared by the course teacher which is considered as direct attainment of POs and PSOs.

Feedback from alumni and employer are then collected for PO and PSO attainment through the curricular and co-curricular activities of diploma program of SCTE&VT, Odisha which is considered as indirect attainment tool. For indirect attainment of POs and PSOs, 5 attainment levels are considered.

The course PO and PSO matrix is then prepared for all the courses considering 80% of direct attainment tool and 20% of indirect attainment tool.

#### (xvi) Academic Audit:

- The Academic Co-ordinator must conduct a meeting to faculties of all the departments to record the monthly progress. Any shortfall recorded must be compensated by taking extra classes.
- Every department must conduct the CCM( class committee meeting: HOD, Subject Teacher, Two student) for each subject to know the progress.
- 3. Inter department Academic Audit must be done time to time.

# RULES FOR LABORATORIES, WORK SHOP & COMPUTER LAB

#### **COMPUTER LAB RULES**

Students are expected to conduct themselves in consonance with the institution's policies relating to Computer Lab Rules which are enlisted below:

- 1. Copying software from the computer lab is illegal and is treated as a misconduct.
- 2. Installation of software or configuration changes on lab computers are not allowed.
- 3. Displaying in appropriate items is considered misuse of computers and will be reported to the authorities. (some examples: sexually explicit, graphically disturbing or harassing images or texts etc.)
- 4. The following are not allowed in the lab.

Rude or disruptive behaviour

Food or drink of any kind

Use of cell phone connections

- 5. Absolute safety of files stored in the network drive can not be guaranteed. Students are responsible for keeping critical files on their own disks.
- 6. Students are required to logout of the workstation completely before leaving the lab.
- 7. Student can use Computer lab only in their assigned lab classes/period or as any other time with specific prior approval in writing on concerned authorities.

10. While leaving the computer lab, the students would make sure that the system is properly shut down.

Violation of these rules may lead to revocation of lab privileges and may result in disciplinary action by the institution.

#### GENERAL RULES FOR LABORATORIES & WORKSHOP

- 1. Students must observe the Dress Code while in the laboratory.
- 2. Sandals or open-toed shoes are NOT allowed.
- 3. Foods, drinks and smoking are NOT allowed.
- 4. All bags must be left at the indicated place.
- 5. The lab timetable must be strictly followed. Prior permission from the Lab Supervisor must be obtained if any change is to be made.
- 6. Students should be PUNCTUAL for laboratory session.
- 7. Lab Sessions must be completed within the given time.
- 8. One must respect the laboratory / staff and its other users. Silence must be maintained in the lab.
- 9. Workspace must be kept clean and tidy at all time.
- 10. All apparatus should be handled with care.
- 11. Students are liable for any damage to equipment caused due to their negligence.
- 12. All equipment and apparatus must be RETURNED to their original place after use.
- 13. Students are strictly PROHIBITED from taking out any items from the laboratory without permission from the Lab Assistant.
- 14. Students are NOT allowed to work alone in the laboratory.
- 15. Student should consult Lab Assistant regarding operation of laboratory equipment.
- 16. One must report to the Lab Assistant if any injury occurs.
- 17. Student should report immediately to the Lab Assistant for any damages to equipment, hazards, and potential hazards.

**CARRIER GUIDANCE** 

- **I.** Bright students are to be motivated to take part in technical quizzes, projects competitions, etc at college and inter-college level.
- **II.** Different personality development classes/ soft skill classes are to be organized for their improvement in personal and communication skill.
- **III.** Different V.S.Ts are to be conducted to make them enable appear in the competitive examination and entrance test for higher education.

# PROTECT

The syllabus prescribed by SCTE&VT, Odisha is to be strictly followed for report writing and selection of project topic.

- a) The Project work duration covers 2 semesters (5th and 6th sem). The Grouping of students, selection of Project, assignment of Project Guide to the Group was done in the beginning of 5th semester under Project Phase-I.
- b) The students are allowed to study literature, any existing system and then define the Problem/objective of the Project.
- c) They have to discuss about the different project topics with their project guide and final selection is to be done based on the feasibility study.
- d) Preliminary work and Design of the system also have to be complete in Phase-I in 5<sup>th</sup>
   Semester.
- e) In Phase-II Development, Testing, Documentation and Implementation have to be completed.
- f) The institution will provide the material cost for the project implementation from the Development fund department wise as per the budget allocation.

# SEMINAR /EXTENSION LECTURES , STUDY TOUR, SKILL ENHANCEMENT TRAINING

1. Each department must conduct two no. of seminars / Extension lectures by inviting resource persons from industries/educational institutions/entrepreneurs in every semester. Honorarium to be paid will be borne from the institute development fund.

- 2. Each Department must conduct at least one industrial visit for the second year and final year students every year. The fuel cost will be borne by the institution Development fund as per OSRTC rules.
- 3. Each Department should conduct skill enhancement training programs for the students by inviting industry people/professionals from training institutes.

# USE OF ICT ENABLED TEACHING LEARNING AIDS

- 1. All the faculties should use smart classroom regularly wherever applicable along with the blackboard teaching.
- 2. Every students must be encouraged to access the institution youtube channel.
- 3. All the faculties must prepare and upload different video lectures in the institute youtube channel.
- 4. Regular recording of the classes/ lectures should be done in the E-studio of the institution for maintaining quality.
- 5. Faculties and students must use NPTEL/SWAYAM /MOOCS portal.
- 6. Students are also to be encouraged for using OD Skill app for theory courses and Vlab for practical courses.

# SOFT SKILL, PREPLACEMENT TRAINING& INTERNSHIP

- 1. Training & Placement Department of the institute has to conduct soft skill & preplacement training programs at regular intervals to enhance the communication skills, technical competence and employability skills.
- 2. As mentioned in the Academic calendar student must attend internship programme during break.
- 3. A seminar is to be conducted after their return from the semester break where they have to share their individual experience.
- 4 A detail report of the Internship programme is to be maintained in the department

TRACER STUDY

Student database should be maintained in each department . The department along with the training & placement department must keep tract of the student atleast for three years keep tract of the engagement of students.

# MECHANISM & PROCEDURE FOR GOOD GOVERNANCE

The institution has specific committees for good governance as indicated below:

Sl No	Name of the committee	Duties & Responsibilities
1	Institution Managing Committee	To supervise & monitor academic & administrative activities of the institution.
2	Financial Resource & Management Committee	Service Rule, Promotion rule and Budget of Institution( Finance & Establishment)
3	Academic Council	Examination Rules & Admission policies
4	Student Induction Program cell	Rules & Regulation of institution and Hostel
5	Mentor Committee & student counselor Committee	Student counseling
6	Disciplinary Committee	Ensure compliance of code of discipline and conduct for students and will suggest action in case of violence
7	SC/ST committee	Promotes the special interest of the students in reserved category.
8	Anti Ragging Cell	To keep a continuous watch and vigil over ragging so as to prevent its occurrence and recurrence.
9	Sexual Harassment cell	To receive complain about any type of misbehavior to girl student or ladies staff member and suggest action.
10	Internal Quality Assurance cell	To review the performance of the staffs and machine maintenance
11	Institute Innovative cell	To conduct meeting/activities of the students for new ideas.

All the faculties of the institution are the members of the Academic Council.For decentralization and proper monitoring faculties of the institution will be assigned with

charges, which they have to co-ordinate and monitor along with their teaching load. They have to take administrative decisions in consultation with Principal as and when required.

#### PROCTORIAL SYSTEM

- 1. The students are to be divided into different groups and are to be assigned to a teacher as mentor.
- 2. Regular interaction of between proctor and students should be done and the teacher guide will mentor the students
- 3. The mentor may interact with the parents of the students as and when required.

#### PARENT TEACHER MEETING

- 1. Parent teacher meeting must be conducted at least twice in each semester. The parents should be in formed about the vision, mission of the institute and the steps taken to achieve the same. They must be made aware of the different stipends available, any change in the institution/hostel policies along with other facilities.
- 2. They must be allowed to discuss with their ward's mentor and should be informed about the student behavior inside and outside the college campus along with his/ her academic performance.
- 3. Proper documentation of meeting must be maintained by each department like notice to parents, attendance sheet, minutes of the meeting, photographs etc.

# FEEDBACK MECHANISM

Feedbacks are to be collected from all the stakeholders at regular intervals.

#### 1. Student Feedback-

Course Exit Feedback- Each student must give feedback on each course at the end of each course and facilities as enclosed in Annexure III. The students has to put the feedback form within stipulated time in the drop

box. The attainment level for the individual items to be calculated. If is less than 2.5 remedial action is to be taken

- 2. Alumni/Employer/Parent feedback :- Feedbacks must be collected from all stakeholders as per the Annexure IV.
- 3. Appropriate remedial action must be taken where ever possible.

# INTERNAL REVENUE GENERATION

In order to have optimum utilization of the resources available, different training programes, testing of material, repairing, manufacturing work should be taken up in extra hours on payment basis. Students are to be encourages to take part in those activities to enhance their practical skills. Remuneration will be paid to the faculties and students involved after following the appropriate guide line.

#### **EXTRACURRICULAR ACTIVITIES**

Along with the academic activities focus must be given for all around development of the students. Students are to be encouraged to participate in different cultural and sports activities. They are to be made aware of the basic social responsibilities and should contribute in some way for the development of society. Different clubs for students should be formed with teacher guide for different activities. They can participate in different inter college, district, state or national level competitions with due permission from the departmental heads. Institute being the member of different professional bodies different activities must be taken up under this.

# **INNOVATIVE PRACTICES**

Students are to be encouraged to bring up the innovative ideas, form starts ups. Training & placement cell has to conduct regular seminars by inviting people from banks, MSME,

PMKVY etc to make them aware of the different financial assistance and guidance they can avail for developing a start up or enterprise.

## **FACULTY CENTRIC POLICIES**

- 1. Appointment Rules : OTE&T Cadre 1985
- 2. Salary: As per 7<sup>th</sup> pay matrix of Government of Odisha
- 3. Promotion rule: Industries Department Notification No 1985
- 4. Higher Study: Government of Orissa Finance Dept Memorandum no 38447 dtd 29<sup>th</sup> July 1980

QIP Programees (AICTE)

Performance Appraisal system:

The state government has a comprehensive Staff performance appraisal and development system.

The self-appraisal form is to be submitted once a year.

The self-appraisal report is forwarded to the Principal.

The Principal has to go through the self appraisal report of the faculties and forward the same to the higher authority. The government of Odisha implements the 5T i.e. Team work, technology, transparency, transformation and time limit will be the five factors on which performance of government officials is judged.

- 5. Heads of the department has submit the PARs of the supporting staffs to the Principal.
- 6. A meeting of the IQAC (Internal Quality Assurance cell) is to be convened every year to review the performance of the faculties every year.