IPS ACADEMY

INSTITUTE OF ENGINEERING & SCIENCE

(A UGC Autonomous Institute affiliated to RGPV)

Academic and Administrative Audit Reports

2024-2025

IPS Academy
Institute of Engineering & Science
(A UGC Autonomous institute affiliated to RGPV, Bhopal)

Details of Academic & Administrative Audits (AAA) for the Academic Year 2024-25

Date of Audit	Visit to the Department	Name of the External Members
19/08/2025	Civil Engineering	1. Dr. Sandeep M. Narulkar, Professor, Civil Engineering, Shri G.S. I.T.S, Indore 2. Mr. R. S. Rajput (IES), General Manager, MP Metro Rail Corporation Limited
11/10/2025	Mechanical Engineering	Dr. Basant Agrawal, Professor, Mechanical Engineering, Shri G.S. I.T.S, Indore
13/10/2025	Computer Science Engineering	Dr. Urjita Thakar, Professor, Computer Science Engineering, Shri G.S. I.T.S, Indore
17/10/2025	Chemical Engineering	Dr. Kailas L. Wasewar, Professor, Chemical Engineering, VNIT Nagpur
25/10/2025	1. Electronics Communication Engineering 2. Electrical and Electronics Engineering	1. Dr. K.K. Sharma, Professor, Elect. Comm. Engineering, MNIT, Jaipur (Raj.) 2. Rakesh Joshi, DGM, TATA Cumins, Dewas (M.P.)

ACADEMIC AUDIT

Academic Year 2024-25

(01 June 2024 to 31 May 2025)

Name of the Department: Civil Engineering Department, IPS Academy Institute of Engineering & Science

Date of Audit: 19/08/2025, Tuesday

	Criteria	Comments	Reviewers Observations and comments
A	**Department Information**		
A1	Year of Establishment	2004	*Department established & running since 2004.*
A2	NBA Accreditation Status	UG Accredited by NBA New Delhi. ***[Annexure A.A2]***	*Noted & verified. NBA Accreditation may be sought for PG programmes as well.*
A3	Dept. vision, mission, graduate attributes/goals clearly defined and its agreement with institute vision, mission and goals	Department Vision & Mission, graduate attributes/goals are well defined in adherence with the same of the Institute.	*Noted.*
A4	No. of UG intake and admission	B.Tech (Civil Engineering) Sanctioned intake – 60 Admission – 32 B.Tech (Working Professional)-30 Sanctioned intake – 30 Admission – 18 ***[Annexure A.A5]***	*50/90 = 55%. Need for improvement.* *[Suggestion: Contact your industry peers for to encourage their employees for taking admission in B.Tech (WP)*
A5	No. of PG programs in the department and admission	02 PG Programs are offered in the department. • M.Tech (Structural Engineering) Sanctioned intake – 18 Admission – 17 • M.Tech (Construction Planning &	*27/36 = 75%. Satisfactory.*

		Management) Sanctioned intake – 18 Admission – 10 *[Annexure A.A5]*			
1	**Curricular Aspects**				
1.1.1	Curricular developed and implemented have relevance to local/national regional and global developmental needs	Yes			*Noted & verified.*
1.1.2	Syllabus Content % (UG& PG):				*Noted.* *UG and PG syllabus is in-line with AICTE model curriculum.*
	Category	**UG Actual Breakup of credits**	**PG (CPM) Actual Breakup of credits**	**PG (STR) Actual Breakup of credits**	
	Employability/ entrepreneurship/ skill development	17(11%)	39(55.71%)	42(60%)	
	PCC (Program Core Courses)	70(42.16%)	16(23%)	16(23%)	
	Basis Sciences	20(12.04%)	3(4.2%)	0	
	Honors and Minors courses	19	0	0	
	Humanities	10(6.02%)	0	0	
	Project	14(8.43%)	1(1.4%)	1(1.4%)	
	Tutorials	15(9.036%)	4(5.7%)	4(5.7%)	
	Department Elective Course	9(5.42%)	9(15%)	12(17.14%)	
	Field projects / research projects / internships	14(8.43%)	1(1.4%)	1(1.4%)	
	Liberal Learning Courses	3(1.80%)	1(1.4%)	1(1.4%)	
	Inter-disciplinary Foundation Courses	4(2.409%)	0	0	
	Skill Based Courses	11(6.626%)	26(37.14%)	26(37.14%)	
	Mandatory Learning Courses	4(2.409%)	4	4	
1.1.3	Syllabus in line with AICTE model curriculum	Yes. We follow the AICTE Model Curriculum and the guidelines provided. Referred with reputed university under the guidance of visionary BoS.			*Verified.* *Syllabus is in-line with AICTE model curriculum.*
1.2.1	New courses introduced out of the total number of courses	11 new courses are Implemented from session 2024-2025. *[Annexure 1.2.1]*			*Percentage of new courses implemented = 18%.* *Noted.*

<table>
<tr><td>1.3.1</td><td>Cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability and other value framework enshrined in Sustainable Development Goals and National Education Policy – 2020 into the Curriculum</td><td><table><tr><th>Cross-cutting issues</th><th>UG</th><th>PG (STR)</th><th>PG (CPM)</th></tr><tr><td>Professional Ethics</td><td>6</td><td>4</td><td>4</td></tr><tr><td>Gender</td><td>1</td><td>0</td><td>0</td></tr><tr><td>Human Values</td><td>6</td><td>4</td><td>4</td></tr><tr><td>Environment and Sustainability</td><td>1</td><td>0</td><td>1</td></tr></table></td><td>Introduce subjects related to Gender equity in PG curriculum as well.</td></tr>
<tr><td>1.3.2</td><td>Number of certificate/value added courses/Diploma Programs offered and Online courses of MOOCs, SWAYAM/ e-PG Pathshala/ NPTEL and other recognized platforms</td><td>04 value added courses offered.

Number of student enrolled-
10(STAAD Pro)
30 (AutoCAD)
26 (MATLAB)
16 (Primavera)

[Annexure 1.3.2]</td><td><u>Suggestion:-</u> All UG and PG students should be required to complete at least one online course each academic year through platforms such as NPTEL, SWAYAM, or other MOOCs, and the institute/department should publish the schedule of available courses and registration timelines on its website to ensure timely awareness and enrolment.</td></tr>
<tr><td>1.3.3</td><td>Is the program have the components of field projects / research projects / internships</td><td>YES. The curriculum has inclusion of field projects/research projects/ internships as per AICTE specifications.
[Annexure 1.3.3]</td><td>Noted & verified.</td></tr>
<tr><td>1.3.4</td><td>Faculty course files containing handouts assignments tutorial sheet, question bank, list of resources/reference materials etc.</td><td>Course files are maintained by the faculty member who is teaching the course in each semester.</td><td>Noted & verified.</td></tr>
<tr><td>1.3.5</td><td>Lab manuals/handouts/SOP</td><td>Lab Manuals are available in respective Labs.</td><td>Noted & verified.</td></tr>
<tr><td>1.3.6</td><td>Syllabus revision frequency:
UG

PG</td><td>BoS meeting is organized at least twice in a year.
DUPC and DPPC are in place for recommendation regarding any change in syllabus.</td><td>Noted & verified.</td></tr>
<tr><td>1.4.1</td><td>Structured feedback for</td><td>The department maintains curriculum</td><td>Noted.</td></tr>
</table>

<table>
<tr><td></td><td>curriculum and its transaction is regularly obtained from stakeholders like Students, Teachers, Employers, Alumni, Academic peers etc.</td><td>feedback from all stakeholders in online/offline form.

[Annexure 1.4.1]</td><td>Feedbacks from all the stakeholders are available.</td></tr>
<tr><td>2</td><td colspan="3">Teaching-Learning and Evaluation</td></tr>
<tr><td>2.1.1</td><td>Enrolment percentage

Number of seats filled (Only first year admissions to be considered)

Number of sanctioned seats</td><td><table>
<tr><th>Programme name</th><th>Programme Code</th><th>Number of seats sanctioned</th><th>Number of Students admitted</th></tr>
<tr><td>B.Tech</td><td>CE</td><td>60</td><td>32</td></tr>
<tr><td>B.Tech (W.P.)</td><td>CE</td><td>30</td><td>18</td></tr>
<tr><td>M.Tech</td><td>CPM</td><td>18</td><td>17</td></tr>
<tr><td>M.Tech</td><td>STR</td><td>18</td><td>10</td></tr>
<tr><td></td><td>Total</td><td>126</td><td>77</td></tr>
</table>[Annexure 2.1.1]</td><td>61 %
Enrolment % satisfies the minimum criteria as per guidelines.

Improvement is however needed in number of admissions in UG (CE) and PG (STR).</td></tr>
<tr><td>2.1.2</td><td>Number of actual students admitted from the reserved categories (SC, ST, OBC etc.) in the first year

Number of seats earmarked for reserved category as per GoI/State Govt. rule</td><td><table>
<tr><th rowspan="2">Year</th><th colspan="5">Number of students admitted from the reserved category</th></tr>
<tr><th>SC</th><th>ST</th><th>OBC</th><th>Gen</th><th>Others</th></tr>
<tr><td>2024-25 (UG)</td><td>1</td><td>4</td><td>3</td><td>23</td><td>1</td></tr>
<tr><td>2024-25 (UG in WP)</td><td>2</td><td>3</td><td>3</td><td>10</td><td>0</td></tr>
<tr><td>2024-25 (PG.CPM)</td><td>2</td><td>0</td><td>6</td><td>8</td><td>1</td></tr>
<tr><td>2024-25 (PG.STR)</td><td>0</td><td>1</td><td>4</td><td>4</td><td>1</td></tr>
</table>[Annexure 2.1.2]</td><td>29/77 = 38%

Need for Improvement in number of admissions in all categories.</td></tr>
<tr><td>2.2.1</td><td>Learning levels of the students and organizes special Programs to cater to differential learning needs of the student</td><td>Department focuses on imparting learning to students through participative, experiential and peer learning methods etc.

Advance and Slow learners are identified and measures are taken to cater needs of both levels of students.

Combined class-groups of advanced and slow learners are formed for developing participative learning among them.

Department organizes following program for students like Software Training, Industrial Visit/Educational Tour.</td><td>Noted & verified.

Remedial classes time table, remedial assignments, study materials etc. for weak students/slow learners found well in place.

Honors and Minor courses are also available for students.</td></tr>
</table>

		Summer/Winter Internship , NEEV – National Level Students' Paper Presentation, SRUJAN – Technical Event and Competition, Sameeksha – Technical Quiz competition etc.	
2.2.2	Student - Full time teacher ratio	13 *[Annexure 2.2.2]*	*Noted & verified. Adequate number of faculties.*
2.3.1	Student centric methods used for enhancing learning experience ICT- enabled tools including online resources for effective teaching and learning process	Participative Learning Experiential Learning Peer Learning etc. (You Tube Video Lectures, etc.)	*The CIVILIPSA YouTube channel is available and regularly updated with e-content.* *One classroom is equipped with a smart board.* *All classrooms are provided with projector facilities.* *A centralized media centre is available for audio-visual support.*
2.3.2	Mentor-Mentee Schemes to address academics and student-psychological issues	Mentor-Mentee scheme is available and practiced regularly. 10 mentees are assigned to one mentee every year.	*Reviewed and verified.* *The Mentor-Mentee process is functioning effectively.* *A Wellness Counsellor is available at the institute level.*
2.3.3	Preparation and adherence of Academic Calendar and Teaching plans	Department Activity Calendar and Teaching Plans are prepared in adherence with the Institute Academic Calendar.	*Noted & verified.*
2.4.1	Number of full time teachers appointed against the sanctioned posts	28 full time faculties against 28 posts 100% *[Annexure 2.4.1]*	*Noted & verified. (26 +02 First Year)*
2.4.2	Full time teachers with Ph.D.	08 % of Full time teachers with PhD = 28% *[Annexure 2.4.2]*	*Noted & verified.*

2.4.3	Total teaching experience of full-time teachers (in number of years)	28 full time faculties. Average experience = 14.2 years *[Annexure 2.4.3]*	*Good. (Between 12 to 15 years)* *Noted & verified.*
2.4.4	Number of full time teachers who have been working in the organization continuously during the entire assessment period	28 full time faculties. Average experience = 13.7 years (in institute only) *[Annexure 2.4.4]*	*Good. (Between 12 to 15 years)* *Noted & verified.*
2.4.5	Number of PhD pursuing faculty	13 faculties are pursuing PhD at present. *[Annexure 2.4.5]*	*Satisfactory.*
2.4.6	Faculty Cadre	Professor – 4 Associate Professor – 1 Assistant Professor - 20	*Noted.*
2.4.7	Faculty Retention with respect to CAYm2	100% *[Annexure 2.4.7]*	*Exceptionally well.*
2.4.8	Full time adjunct faculty in the department	Nil	*Noted.*
2.4.9	Part time adjunct faculty in the department	01	*Noted.* *Dr. O.P. Bhatia* *Professor (Retd.),* *SGSITS*
2.4.10	Faculty/Industry People Invited in co-teaching	15 Expert lectures *[Annexure 2.4.10]*	*Noted.*
2.4.11	JRF/SRF/TA/RA in the department	TA - 01 RA -01	*Noted.* *Comment:- RA can only be appointed under a funded research project. But there is no ongoing funded research project in the concerned department.*
2.5.1	Number of days from the date of last semester-end/ year- end examination till the last date of declaration of results	23 days	*Satisfactory*
2.5.2	Number of Student complaints/grievances about	No grievances so far. (Grievance Redressal Mechanism is	*Very good*

	evaluation	available)	
2.5.3	IT integration and reforms in the examination procedures and processes Improvement in Examination Management System (EMS) of the institution	ARR available on Institute Webpage	*Noted.*
2.5.4	Exam Evaluation Scheme: • Theory • Practical • Audit of question papers through experts • External examiners participation in practical evaluation • Open Book Exams • Comprehensive viva voice exam	Theory evaluation Scheme comprises of HA (15) + MST (25) + ESE (60) = 100 Practical evaluation Scheme comprises of Internal (40) + ESE (60) = 100 Moderation of Question Paper is done. External Examiners are called for Practical Evaluation. Open Book Exam – YES. CVV - No	*Noted.* *Open Book Examination is in practice and is by the BoS.*
2.6.1	CO-PO Assessment	Direct /Indirect Assessment Process of CO-PO Assesment classified in to Direct Assesment and Indirect Assesment. Direct Assesment Class/assignment test, internal assessment tests, assignments, semester examinations, seminars, laboratory assignments/practical, minor projects etc. Indirect Assesment Course Exit Survey	*Noted.* *Very good.*
2.6.2	Pass percentage of students (excluding backlog students)	B.Tech – 97% M.Tech (STR) – 50 % M.Tech (CPM) – 75 % ***[Annexure 2.6.2]***	*Need for improvement in M.Tech (STR) thesis submission within 2 years from admission.* *<u>Suggestion:</u>* *Motivate students to publish quality research in SCI/ WoS/SCOPUS journals. This will*

			fasten their dissertation completion.
2.6.3	DUPC-DPPC: UG, PG	DUPC for UG programme and DPPC for PG programmes are constituted and functional at department level.	*Noted. Appreciable that the students are also an integral party for curriculum development.*
2.6.4	Quality of Students projects and relevance to specialization UG & PG	B.Tech – 09 projects M.Tech (STR)- 08 projects M.Tech (CPM)- 09 projects Quality of UG & PG students is assessed regularly (once every month) in terms of aim of work, content, presentation skills, defence viva, resource management etc. criteria.	*Noted.* *UG and PG students should be encouraged to publish research paper in SCI/WOS/SCOPUS Journals.*
2.7.1	Online student satisfaction survey regarding the teaching learning process.	Collected at Institute Level.	*Noted & verified.*
3			
3.1.1	Research facilities are frequently updated Policy for promotion of research which is uploaded on the institutional website and implemented	https://ies.ipsacademy.org/wp-content/uploads/2016/12/Research-Policy-Revised.pdf	*Good policy framework.*
3.1.2	Amount of seed money provided by institution to its teachers for research	Nil	*Needs improvement.* *Faculty should be motivated to apply for seed funding for research.*
3.1.3	Number of teachers receiving national/ international fellowship/ financial support by various agencies for advanced studies/ research	05 Dr.Archana Keerti Chowhdary Dr.Devaanshi Jagwani Ms. Sonam Yadav Mr. Lalitesh Sinha Mr.Neeraj Mishra	*Noted* *Faculties should utilise the received fellowships to gain academic advantage from it.*
3.2.1	Research funding received by the institution and its faculties	Sanctioned with a grant of ₹17,10,000	*Praiseworthy achievement.*

	through Government and non-government sources	*[Annexure 3.2.1]*	
3.2.2	Number of research projects per teacher	Nil *[Annexure 3.2.2]*	*Needs improvement.* *Faculties should send more research proposals to government agencies for grants.*
3.2.3	Number of teachers recognized as research guides	03	*Needs improvement.* *Remaining 5 PhD holder faculties should try to register in the coming session.*
3.2.4	Faculty applied for research funding	06	*Appreciable initiative.*
3.3.1	Awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same(IPR like Patent etc.)	03 Design Patents Granted	*Very good.*
3.4.1	Code of Ethics for research and the implementation	https://ies.ipsacademy.org/wp-content/uploads/2016/12/Research-Policy-Revised.pdf	*(A)* *All committees present.*
3.4.2	Number of candidates registered for Ph. D per teacher	8/3 = 2.66 (03 faculties are recognized as research guides. 08 candidates are registered for PhD under Dr. Amit Sharma)	*Noted* *Needs improvement*
3.4.3	Number of research papers published in the Journals as notified on UGC CARE list	08	*08/26 = 0.31, <1. Poor* *Comment:-* *Marginal improvement observed since past academic year. But need for more*

			efforts and improvement in publication to faculty ratio.
3.4.4	Number of books and chapters in edited volumes published	12 (Book Chapters)	*12/26=46%* *Noted*
3.4.5	Average Citation index in Scopus/ Web of Science	5.5	*22/4 =5.5* *Noted*
3.4.6	Scopus/ Web of Science – h-index	2.33	*49/21 = 2.33* *Noted*
3.4.7	Faculty publication in reputed conferences	07	*Noted* *Needs improvement*
3.4.8	Faculty publication ratio (UGC CARE list Journals)	0.54	*0.54, <1.* *Needs improvement.*
3.5.1	Revenue generated from consultancy and corporate training	15300/-	*Unsatisfactory.* *Needs improvement* *Should try for NABL certification.*
3.6.1	Extension activities in sensitizing students to social issues and holistic development	13 (NSS)+ 1 Rural Outreach Various extension activities like rural outreach, traffic awareness, voter awareness, blood donation camp, health checkups, NSS, NCC etc. are organised as institute and department level for sensitizing students to social issues and holistic development	*Noted*
3.6.2	Number of extension and outreach programs conducted through organized forums including NSS/NCC with involvement of community	13 (NSS)+ 1 Rural Outreach	*>10.* *Excellent*
3.7.1	Faculty industry connect: Number of functional MoUs Number of industries visited by faculty	04 (Ultratech,MPIDC,PathIndia,MPMRC) 06 (DEWATS, IECRS, NIIST,MIPT Russia, UltraTech, ICADR Russia) 03 (IT Park+ MPMRC+ RRCAT Indore)	*Noted.* *Good numbers of industry connect, industrial visits, & active MoU is present.*
3.7.2	Industry participation in funded projects : Co-teaching details for each course:	01	*Noted.*
3.7.3	Faculty travelled abroad/in country for collaboration	05 1. Dr. Amit Sharma,	*Noted.*

		2. Ms. Swati Shrivastava, 3. Mr. Lalitesh Sinha, 4. Dr. Archana K. Chowdhary 5. Dr. Keerti Chowdhary	*Good number*
4	**Infrastructure and Learning Resources**		
4.1.1	No. of classrooms Laboratories Computing equipment ICT – enabled facilities such as smart class, LMS etc. Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc.	UG: 5 PG: 2 15 86 All classrooms are smart classes & equipped with LCD Projector Smart Board is used for digital content CMS is used as cloud-based resource for LMS where faculty can upload assignments and study guides, and students can access them from anywhere. 1) 3 Audi (Available at Institute level for Cultural Activities) 2) 2 Quadrangle & Central ground for outdoor games 3) Student Section for indoor games and yoga activity	*Noted.* *The department has adequate physical facilities to accommodate the student intake.* *Suggestion: A Smart Board should be provided in the department.*
4.1.2	Expenditure excluding salary, for infrastructure development and augmentation	Expenditure for infrastructure development and augmentation is available at institute level.	*Noted*
4.1.3	Equipments and facilities available and their status: Log book status Software Modelling and computational tools and facilities Incubation Labs	Projectors, Printers, Wi-Fi, Departmental Library, Photocopy Machines, Personnel Faculty Cabin with PC's with LAN connection, Generator Smart TV, Wheel Chair available in department and are in working condition. Available at respective labs. 14 Yes. Simulation Lab is well equipped with computational facilities and software. Nil	*Noted & verified.*

4.1.4	Industry sponsored labs	Concrete Testing Lab (NB-006) is sponsored by UltraTech as Centre of Excellence.	*Noted & verified.*
4.1.5	New lab/equipments added New software added MODROBS Sanctioned Testing Lab	Nil Nil Two MODROBS sanctioned before 2022-23. None in 2024-2025 Material testing lab is available.	*Noted & verified. Softwares and computers are adequate in number.*
4.1.6	Virtual Lab Development	Lab Access by MoE (Available at Institute Website)	*Noted*
4.2.1	Library facilities The library is optimally used by the faculty and students	Yes 1) 1 Central Library at Institute level with E-journal facility. 2) 1 Departmental Library	*Commendable work. E-journal is also available.* *Suggestion:- Department Library can also be developed as student self-learning centre.*
4.2.2	Expenditure for purchase of books/ e-books and subscription to journals/e-journals	As Per Departmental/ Institute Budget	*Good.*
4.3.1	IT facilities and sufficient bandwidth for internet connection	Yes Campus is Wi-Fi Enabled with bandwidth 1 Gbps.	*Noted & verified.*
4.3.2	Student - Computer ratio	1:1 (UG) 1:1 (PG)	*Very good ratio.*
4.3.3	Audio visual centre, mixing equipment, editing facility, media studio, lecture capturing system(LCS) and related hardware and software for e-content development	Media centre available at Institute Level with following facilities: Glass Board Studio Chroma studio Green Board Studio White Board Studio	*Appreciable work.* *Media centre available at institute level.*

		Video Switcher and Mixer Video Conferencing Technology	
4.4.1	Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component	As Per Departmental Budget	*Noted.*
4.4.2	Procedures for maintaining and utilizing physical and academic support facilities – laboratory, library, sports complex, computers, classrooms etc	Regular Inspection and Calibration of Instruments (Audit report available at respective laboratories)	*Committees are in place.* *Proposals are obtained at the institute level.*
5	**Student Support and Progression**		
5.1.1	Number of students benefited by scholarships and free ships provided by the institution government and non-government bodies, industries, individuals, philanthropists	Scholarships are sanctioned from the government for session 2024-25. SC (14) ST(14) OBC (19) Awaas (11) Central Sector (1)	*Noted* *(59/142)*100 = 41.55% students received at least one type of scholarship.*
5.1.2	Efforts taken to provide career counselling including e-counselling and guidance for competitive examinations	• Guidance & Assistance for Competitive Exams (GAPCE) by Civil Engineering Department. • To test & evaluate the General Aptitude of Civil Engineering students (General Aptitude Test) Organized by Training & Placement • To educate students about opportunities of placement in Civil Engineering, Department organized "Placement-o-Talk".	*Guidance for GATE and other Govt. Exams is provided to students for free which is a praiseworthy step.*
5.1.3	Capacity development and skills enhancement activities are organized for improving students' capability	Soft skills, Annual seminar, paper presentation, internship, software training. AUTOCAD Training (UG) NEEV 2024 (UG) SRUJAN 2023 (UG) SAMEEKSHA 2023 (UG) SAKRIYA 2023-24 (PG) ***[Annexure 5.1.3]***	*(A)* *Very good*
5.1.4	Redressal of student grievances including sexual harassment and ragging cases	Redressal of student grievances including sexual harassment and ragging cases no any grievances for session 2024-25 ***[Annexure 5.1.4]***	*(A)* *Noted*

5.1.5	Student Performance: Passing out in first attempt % Student scoring first class (>6.5 CGPA) No. of UG Students Graduating/ed in 4 years No. of UG Students Graduating/ed in more than 4 years No. of PG Students Graduating/ed in 2 years No. of PG Students Graduating/ed in more than 2 years	 97% 11 35 01 PG(03): CPM:03 STR:00 PG(14): CPM:06 STR:08	*Very Good in UG.* *Needs sincere improvement in PG (STR).*
5.1.6	Result Analysis (UG & PG Pass Out Performance): Students with CGPA 10 Students with CGPA 9 to <10 Students with CGPA 8 to <9 Rest all UG,PG	 UG: 00, PG: 00 UG: 01, PG: 00 UG: 04, PG: 10 UG: 31, PG: 07	*Needs improvement in PG.*
5.1.7	UG/PG(Co/extra-curricular activities)	UG – NCC/NSS, NEEV, Srujan, Sameeksha etc. PG – Sakriya I, Sakriya II etc.	*Noted*
5.1.8	Student industrial internships	Pradhan Mantri Awaas Yojna- Gramin (with stipend) - 07 CPWD, IIT, Indore - 07 Bharat Lifestyle - 01 Prakash Asphalting & Toll Highways (India) Ltd. - 01 Amrutam 2.0 (with stipend) - 10	*Noted* *Excellent* *17 Students have pursued Government funded internships*
5.1.9	Student publications	19 Research paper presented by students	*Good.* *Encourage more students to publish in SCI/ Scopus/WOS journals.*
5.1.10	Student Start-ups	01 Start-ups	*Noted.* *More initiatives are required for promoting the start-up.*

5.1.11	Innovative Product/Prototype Developed by Students : Prototype Developed Product Developed Product+Prototype Developed	Technical model making competition Srujan is organized at deptt. Level every year where students prepare models of structure (i.e. trusses bridges etc.). Models are then tested & evaluated for finalizing the best models.	*Students shall be encouraged to participate at national/international level tech-fests/competitions at IITs, NITs etc.*
5.2.1	Number of students placed and package received (Min. and Max.) Number of students progressing to higher education	05 Min. Package – 1.80 LPA Max. Package – 6.10 LPA Higher education - 01	*Needs improvement.* *Suggestion:-* *Alumni who are entrepreneurs or are associated with industry may be approached for recruitment drives for more placement.*
5.2.2	Number of students qualifying in state/ national/ international level examinations (eg: GATE/ NET/ SLET/ Civil Services/ State government examinations etc.)	GATE - 01	*(01/36)*100 = 2.7%* *Needs improvement. This will also increase higher education enrolment.*
5.3.1	Number of awards/medals for outstanding performance in sports/cultural activities at University / state /national / international Level events	02	*Noted*
5.3.2	Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the department/institution	Students are members of DUPC, DPPC, Advisory Board and BoS etc. Committees.	*Praiseworthy work.*
5.3.3	Organizes following activities: Sports competitions/events Cultural competitions/events Technical fest/Academic fest Any other events through Active clubs and forums	Technical fest- Srujan, Sakriya-I & Technical fest- Srujan, Sakriya-I & Sakriya-II Quiz competition- Sameeksha Paper presentation- NEEV Sport & cultural- Swaranjali (Institute level)	*(A)* *Appreciable.*
5.4.1	Alumni contribution to the	New alumni registration	*Needs*

	institution through registered Alumni association		*improvement. Active Participation of Alumni in development of institution/department needs more attention.*
5.4.2	Alumni contributes and engages significantly to the development of institution through academic and other support system	Alumni are participating in: 1. Departmental curriculum development (i.e. Bos, Advisory Board, Placement etc.) 2. Placements (Mr. Yash Goyal, CCPL, Indore)	*Alumni are the part of Advisory board, BoS. They also take part in placement activities.* *Alumni feedback is also obtained for curriculum development, facilities enhancement, employment generation etc.*
5.4.3	Professional Societies/Chapter and organizing events	1. Indian Geotechnical Society (IGS): (International conference) 2. Indian Concrete Institute (ICI): (NEEV)	*Student participation in professional society events outside the institute is less and needs improvement.*
5.4.4	Publication of technical magazines, newsletters etc.	1. Sandarbh (E-magzine) 2. News article	*Noted.*
6	**Governance, Leadership and Faculty Empowerment Strategies**		
6.1.1	Governance and leadership are in accordance with the vision and mission and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance	Faculty and students actively contribute to the holistic development of the department and institution through participation in various committees.	*Noted.*
6.2.1	Committees in place and members: Advisory board, BoS Purchase, Grievance etc.	Yes (Annexure 6.2.1)	*Noted.*
6.3.1	Performance appraisal system, effective welfare measures for teaching and non-teaching staff	Appraisal system and welfare measures are done as per AICTE norms.	*Noted.*

	and avenues for career development/progression		
6.3.2	Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies	14 -Faculties received financial assistance for life member and 02-faculty members for attending conferences and workshops.	*Good. (16/26)*100 =62% faculties were provided financial support.*
6.3.3	International/National Conferences, symposiums, seminars, research conclaves, workshops, FDPs, STTP, Trainings, Orientation / Induction Programs, Refresher Course etc. attended	No. of faculty attended the program -21 (Annexure 6.3.3)	*Very Good (21/26)*100 = 81%*
6.3.4	International/National Conferences, symposiums, seminars, research conclaves, workshops, FDPs, STTP, Trainings, Orientation / Induction Programs, Refresher Course etc. Conducted	17 [Annexure 6.3.4]	*Noted*
7	**Values and Best Practices**		
7.1.1	Gender equity & sensitization in curricular and co-curricular activities	• Focus on ethics through subjects like Professional Practice, Law & Ethics. • Participation of female faculties & students in various annual technical, cultural and sports events like Srujan, Sameeksha, Swaranjali etc. as Coordinator, Volunteers and Participants. • 01 Female Students have joined NCC through institute.	*Commendable work.*
7.2.1	Department Best Practices	• Guidance and Assistance Program for Competitive Exams – Free guidance and assistance to students after regular class hours. • Honours and Minor Course • Department YouTube Channel – for providing free e-content. • Department Instagram Page – For quick dissemination of useful information & events among students.	*The conduction of guidance programs for students, along with the availability of a YouTube channel and an Instagram page at the department level, is praiseworthy.*
8	**Supporting staff contributions**		
8.1.1	Qualification and participation in academics	B.E./B.Tech/ Diploma/ ITI Lab Staff: Demonstration of experiments, and handle laboratories	*Noted*

		Calibration/Maintenance records of lab equipments	
8.1.2	Filling and data record keeping	Yes. (All the data records of the department are maintained by office staff)	*Noted*
8.1.3	House keeping	Outsourced	*Noted*
8.1.4	Lab maintenance /office maintenance	Yes (All the laboratories are maintained by lab staff)	*Noted*
8.1.5	Staff sent for training/ workshops/ skill up gradation/ qualification improvement	Technical Skill Development Programme	*Noted*
9	**Other Important Aspects**		
9.1.1	Feedback taken from various stake holders (Passing out students, Alumni, Industry, Parent etc.)	Feedback is collected from all stakeholders	*Students, Teachers, Employers, and Alumni Feedback are collected periodically.*
9.1.2	Entrepreneurship Cell	Available	*Noted & verified.*
9.1.3	Department Webpage	https://ies.ipsacademy.org/departments/civil-engg/	*Available*
9.1.4	Self-Learning	Course included in curriculum. Also inculcated through events and activities like NEEV, Srujan, Sameeksha etc.	*Noted. Course is available.*
10	**Reviewer's final comments on dept. strengths and scope for improvement**		*Please refer below:*

Strength(s):

- Adequate faculty strength with good average teaching experience.
- Mentor-Mentee scheme, remedial classes, and wellness counseling in place.
- Use of ICT-enabled teaching (YouTube channel, smart board, projectors, media centre).
- Guidance programs for competitive exams and placement assistance are praiseworthy.
- Good student support activities (industrial visits, internships, NSS/NCC, cultural/technical fests).
- Strong participation in extension activities and outreach programs.
- Research achievements include funded project (₹17.1 lakhs) and 3 design patents granted.
- Active MoUs, industry connect, and expert lectures conducted.
- Infrastructure adequate with smart classrooms, central library, departmental library, and simulation labs.
- Strong governance structure with committees in place and faculty/student involvement.

Weakness(es):

- Less number of admissions in UG & PG (STR).
- Limited participation of students in professional society events outside the institute.
- Less number of research publications
- Limited number of faculty recognized as PhD research guides (03 only).
- No significant consultancy revenue generation; NABL certification yet to be obtained.
- Limited start-ups and innovative prototypes at national/international level competitions.
- Low number of students qualifying in national level competitive exams.
- Alumni contribution and participation need strengthening.
- Need for improvement in awareness and completion of online courses (NPTEL/SWAYAM).

Signature of the Reviewer (1):

Name of the Reviewer : Dr. Sandeep M Narulkar

Designation & Affiliation : Professor & Head, Civil Engineering & Applied Mechanics Department
Shri G. S. Institute of Technology & Science, Indore, (M.P.)

Signature of the Reviewer (2):

Name of the Reviewer : Mr. R.S. Rajput (IES)

Designation & Affiliation : General Manager (Civil-EL)
MP Metro Rail Corporation Limited

ACADEMIC AUDIT
Academic Year 2024-25

Name of the Department: Mechanical Engineering Date of Audit: 11 /10/2025

	Criteria	Comments	Reviewers Observations and comments
A	**Department Information**		
A1	Year of Establishment	Department started in 2013	Satisfactory
A2	NBA Accreditation Status	Department NBA Accredited from 2019-2022 Applied for accreditation this year i.e. in 2025	Satisfactory
A3	Dept. vision, mission, graduate attributes/goals clearly defined and its agreement with institute vision, mission and goals	**Vision**:"Be a Nationally recognized mechanical engineering department excellent in education, training, research and innovation that attracts, rewards, and retains outstanding faculty, students, and staff to build a Just and Peaceful Society" **Mission** : M1.Imparting quality education to the students and maintaining vital, state-of-art research facilities for faculty, staff and students. M2. Create, interpret, apply and disseminate knowledge for learning to be an entrepreneur and to compete successfully in today's competitive market. M3.To inculcate Ethical, Social values and Environment awareness.	Satisfactory
A4	No. of UG intake and admission	UG intake -30 UG Admission- 34	Satisfactory
A5	No. of PG programs in the department and admission	01(M. Tech –Robotics) Admission-06	Satisfactory
1	**Curricular Aspects**		
1.1.1	Curricular developed and implemented have relevance to local/national regional and global developmental needs	Curricular developed and implemented as per national and global need File Attached	Satisfactory (National /Global Justification)
1.1.2	Syllabus Content % (UG & PG): Employability/ entrepreneurship/ skill development PCC (Program Core Courses)	Syllabus Content fulfill need of NEP 2020 File Attached	Satisfactory

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	Basis Sciences Honors and Minors courses Humanities Project Tutorials Department Elective Course Field projects / research projects / internships		
1.1.3	Syllabus in line with AICTE model curriculum	Syllabus in line with AICTE model curriculum & according to National Education Policy – 2020	Syllabus in lined with AICTE model curriculum
1.2.1	New courses introduced out of the total number of courses	Previous Scheme Implemented	Satisfactory
1.3.1	Cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability and other value framework enshrined in Sustainable Development Goals and National Education Policy – 2020 into the Curriculum	New course on Professional Ethics, Gender, Human Values, Environment and Sustainability introduced	Satisfactory
1.3.2	Number of certificate/value added courses/Diploma Programs offered Online courses of MOOCs, SWAYAM/e-PG Pathshala/ NPTEL and other recognized platforms	One Week Entrepreneurship Skill Development Program (ESDP) by MSME Technology Center, Indore	Add some NPTEL etc courses.
1.3.3	Is the program have the components of field projects / research projects / internships	Yes Curriculum having weightage of field projects / research projects / internships File Attached	Satisfactory
1.3.4	Faculty course files containing handouts assignments tutorial sheet, question bank, list of resources/reference materials etc.	Faculty members maintained course file Attached course file	Satisfactory

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1.3.5	Lab manuals/handouts/SOP	Lab manual maintain and having handouts and available on website	Satisfactory
1.3.6	Syllabus revision frequency: UG/PG	BoS Meeting held twice in academic year for syllabus revision and updating File Attached	Satisfactory
1.4.1	Structured feedback for curriculum and its transaction is regularly obtained from stakeholders like Students, Teachers, Employers, Alumni, Academic peers etc	Structured feedback for curriculum is maintained File Attached	Seen, Suggested that may be taken online by Google form online
2	**Teaching-Learning and Evaluation**		
2.1.1	Enrolment percentage Number of seats filled (Only first year admissions to be considered) Number of sanctioned seats	100% 34 30	Noted
2.1.2	Number of actual students admitted from the reserved categories (SC, ST, OBC etc.) in the first year Number of seats earmarked for reserved category as per GoI/State Govt. rule	19 (OBC) 8 (SC) 1 (ST) File Attached Yes, As per Govt. rule	Noted
2.2.1	Learning levels of the students and organizes special Programs to cater to differential learning needs of the student	Mentor identify learning levels of students File Attached	Seen & Found ok
2.2.2	Student - Full time teacher ratio	16.2 UG -162 PG -36 Total Faculty- 10 (Excluding First year)	Seen & Found ok
2.3.1	Student centric methods used for enhancing learning experience ICT- enabled tools	File Attached	Seen & Found ok

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	including online resources for effective teaching and learning process		
2.3.2	Mentor-Mentee Schemes to address academics and student-psychological issues	Mentor-Mentee File attached	Seen & Found ok
2.3.3	Preparation and adherence of Academic Calendar and Teaching plans	As per institute Academic calendar, department academic calendar is framed & implemented File Attached	Seen & Found ok
2.4.1	Number of full time teachers appointed against the sanctioned posts	21 Full time teachers appointed against the sanctioned posts File Attached	Seen & Found ok
2.4.2	Full time teachers with Ph.D.	03 File Attached	Noted
2.4.3	Total teaching experience of full-time teachers (in number of years)	15.4 (11.7) File Attached	Seen & Found ok
2.4.4	Number of full time teachers who have been working in the organization continuously during the entire assessment period	19 File Attached	Seen & Found ok
2.4.5	Number of PhD pursuing faculty	16 File Attached	Noted
2.4.6	Faculty Cadre	Professor -01 Associate Professor- 4 Assistant professor -16 File Attached	Noted
2.4.7	Faculty Retention with respect to CAYm2	100 % File Attached	Seen & Found ok
2.4.8	Full time adjunct faculty in the department	-	-
2.4.9	Part time adjunct faculty in the department	-	-
..4.10	Faculty/Industry People Invited in co-teaching	-	Try to contact industry person
2.4.11	JRF/SRF/TA/RA in the department	JRF- 03/ RA-03 One JRF appointed by SERB File Attached	Seen & Found ok
2.5.1	Number of days from the date of last semester-end/ year- end examination till the last date of declaration of results	90 Days, As Perusal Answer sheet Perusal File attached	Seen & Found ok
2.5.2	Number of Student complaints/grievances	Perusal Answer sheet is done	Seen & Found ok

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	about evaluation	Perusal File attached	
2.5.3	IT integration and reforms in the examination procedures and processes Improvement in Examination Management System (EMS) of the institution	All data maintained on Computer Management System (CMS)	Seen & Found ok
2.5.4	Exam Evaluation Scheme: Theory Practical Audit of question papers through experts External examiners participation in practical evaluation Open Book Exams Comprehensive viva voice exam	 60 40 Yes Yes No Yes	Seen & Found ok
2.6.1	CO-PO Assessment	Assessment of CO-PO done on Computer Management System (CMS) File Attached	Seen & Found ok
2.6.2	Pass percentage of students (excluding backlog students)	Final Year – 89% Third Year – 87% Second Year- 92% File Attached	Seen & Found ok
2.6.3	DUPC-DPPC: UG, PG	DUPC and DPPC meetings are conducted every year File attached	Seen & Found ok
2.6.4	Quality of Students projects and relevance to specialization UG & PG	➢ To maintain quality of Project work, Project are to be evaluated by Panel of faculties ➢ Students allotted project as per their interest ➢ UG students are encouraged to publish project work in recommended conferences/journals Project File Attached	Seen & Found ok
2.7.1	Online student satisfaction survey regarding the teaching learning process.	Online survey done, (link available on website)	Seen & Found ok
3	**Research, Innovations and Extension**		

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3.1.1	Research facilities are frequently updated Policy for promotion of research which is uploaded on the institutional website and implemented	Policy for promotion of research which is uploaded on website File Attached	Seen & Found ok
3.1.2	Amount of seed money provided by institution to its teachers for research	Seed money provided to two faculty members Dr. J. Ponmozhi and Mr. Rahul Sharma File Attached	Seen & Found ok
3.1.3	Number of teachers receiving national/ international fellowship/financial support by various agencies for advanced studies/ research	File Attached	Seen & Found ok
3.2.1	Research funding received by the institution and its faculties through Government and non-government sources	Yes, Faculty received research funding File Attached	Seen & Found ok
3.2.2	Number of research projects per teacher	Student Project allotted to Faculty members File Attached	Seen & Found ok
3.2.3	Number of teachers recognized as research guides	University not granted Research Center to Institute	Seen & Found ok
3.2.4	Faculty applied for research funding	Yes	Seen & Found ok
3.3.1	Awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same (IPR like Patent etc.)	Institute having IIC and MSME cell	Seen & Found ok
3.4.1	Code of Ethics for research and the implementation	Research policy available on website	Seen & Found ok
3.4.2	Number of candidates registered for Ph. D per teacher	University not granted Research Center to Institute	Seen & Found ok
3.4.3	Number of research papers published in the Journals as notified on UGC CARE list	06 File Attached	Seen & Found ok
3.4.4	Number of books and	-	

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	chapters in edited volumes published		
3.4.5	Average Citation index in Scopus/ Web of Science	43	Seen & Found ok
3.4.6	Scopus/ Web of Science – h-index	2	Seen & Found ok
3.4.7	Faculty publication in reputed conferences	06 File Attached	Seen & Found ok
3.4.8	Faculty publication ratio (UGC CARE list Journals)	0.315 File Attached	Seen & Found ok
3.5.1	Revenue generated from consultancy and corporate training	--	-
3.6.1	Extension activities in sensitizing students to social issues and holistic development	Extension activities on social issues and holistic development organized File Attached	Seen & Found ok
3.6.2	Number of extension and outreach programs conducted through organized forums including NSS/NCC with involvement of community	Outreach program conducted File Attached	Seen & Found ok
3.7.1	Faculty industry connect: Number of functional MoUs Number of industries visited by faculty	Faculty connect through industry 02 06 File Attached	Seen & Found ok
3.7.2	Industry participation in funded projects : Co-teaching details for each course:	Yes Industry person taking expert lecture	Seen & Found ok
3.7.3	Faculty travelled abroad/in country for collaboration	Yes Collaboration with many industries	Noted
4	**Infrastructure and Learning Resources**		
4.1.1	No. of classrooms Laboratories Computing equipment ICT – enabled facilities	04 12 30	Noted

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	such as smart class, LMS etc. Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc.	Yes Yes	
4.1.2	Expenditure excluding salary, for infrastructure development and augmentation	Expenditure on maintenance and infrastructure development Maintenance File Attached	Seen & Found ok
4.1.3	Equipments and facilities available and their status: Log book status Software Modeling and computational tools and facilities Incubation Labs	 Lab Manual Ansys, Solidworks Open source modeling software available AICTE IDEA Lab	Seen & Found ok
4.1.4	Industry sponsored labs	No Industry sponsored lab Valvo Eicher, Pithampur provided Engine	Try to collaborate with Industry
4.1.5	New lab/equipments added New software added MODROBS Sanctioned Testing Lab	Every year new equipment added Open source software(Python) - - File Attached	Seen & Found ok
4.1.6	Virtual Lab Development	Experiments performed on virtual lab	Seen & Found ok
4.2.1	Library facilities The library is optimally used by the faculty and students	Department having Well established Library	Seen & Found ok
4.2.2	Expenditure for purchase of books/ e-books and subscription to journals/e-journals	Department purchase books/ e-books and subscription to journals/e-journals at institute level File Attached	Seen & Found ok
4.3.1	IT facilities and sufficient	1 GBPS Speed and Wi-Fi campus	Noted

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	bandwidth for internet connection	File Attached	
4.3.2	Student - Computer ratio	3:1(30 computer Lab with latest software Solid works, Pro-E and Ansys)	Seen & Found ok
4.3.3	Audio visual centre, mixing equipment, editing facility, media studio, lecture capturing system(LCS) and related hardware and software for e-content development	Institute having media center in which faculty members record their lecture File Attached	Seen & Found ok
4.4.1	Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component	Every year department provided budget for maintenance activities] Budget File Attached	Seen & Found ok
4.4.2	Procedures for maintaining and utilizing physical and academic support facilities – laboratory, library, sports complex, computers, classrooms etc	For maintenance of a clean campus environment, grade IV staffs are assigned to various jobs and duties Maintenance File Attached	Noted
5	**Student Support and Progression**		
5.1.1	Number of students benefited by scholarships and freeships provided by the institution government and non-government bodies, industries, individuals, philanthropists	Scholarship as per Govt. Norms File Attached	Noted
5.1.2	Efforts taken to provide career counseling including e-counseling and guidance for competitive examinations	Expert lecture from alumina and GATE qualified students File Attached	Seen & Found ok
5.1.3	Capacity development and skills enhancement activities are organized for improving students' capability	Yes various programs are organized for improving student's capabilities File Attached	Seen & Found ok
5.1.4	Redressal of student grievances including sexual harassment and ragging cases	Redressal of student grievances including sexual harassment and ragging cases at institute level	Seen & Found ok
5.1.5	Student Performance:		Noted

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	Passing out in first attempt %	17	
	Student scoring first class (>6.5 CGPA)	9	
	No. of UG Students Graduating/ed in 4 years	17	
	No. of UG Students Graduating/ed in more than 4 years	01	
	No. of PG Students Graduating/ed in 2 years	NIL	
	No. of PG Students Graduating/ed in more than 2 years	01 Attached - File	
5.1.6	Result Analysis (UG & PG Pass Out Performance) Students with CGPA 10 Students with CGPA 9 to <10 Students with CGPA 8 to <9 Rest all UG,PG	NIL 01 03 UG-13 PG-00 Attached -File	Noted
5.1.7	UG/PG (Co/extra-curricular activities)	Students actively participated in various activities File Attached	Seen & Found ok
5.1.8	Student industrial internships	Yes File Attached	Seen & Found ok
5.1.9	Student publications	Students participated in annual paper presentation competition File Attached	Seen & Found ok
5.1.10	Student Startups	Nil	Motivated student for startup
5.1.11	Innovative Product/Prototype Developed by Students : Prototype Developed	- 03 (BAJA)	Seen & Found ok

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	Product Developed Product, Prototype Developed	- -	
5.2.1	Number of students placed and package received (Min. and Max.) Number of students progressing to higher education	13 6 LPA- 1.8 LPA 01 File Attached 1	Noted
5.2.2	Number of students qualifying in state/ national/ international level examinations (eg: GATE/NET/SLET/Civil Services/State government examinations etc.)	File Attached	Seen & Found ok
5.3.1	Number of awards/medals for outstanding performance in sports/cultural activities at University / state /national / international Level events	File Attached	Seen & Found ok
5.3.2	Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the department/institution	Active Students participated Board of studies ,DUPC/DDPC, Anti Ragging Committee File Attached	Seen & Found ok
5.3.3	Organizes following activities: Sports competitions/events Cultural competitions/events Technical fest/Academic fest Any other events through Active clubs and forums	Sport Competition, Cultural events, tech Fest organized every year SAE BAJA Society in department File Attached	Seen & Found ok
5.4.1	Alumni contribution to the institution through registered Alumni association	Registered Alumni association File Attached	Seen & Found ok
5.4.2	Alumni contributes and engages significantly to	Active Alumina participation • Member in Board of studies	Seen & Found

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	the development of institution through academic and other support system	• Member in Advisory Committee • Expert lecture	ok
5.4.3	Professional Societies/Chapter and organizing events	Department has following Professional Societies/Chapter • SAE BAJA Society Organized event regularly File attached	Seen & Found ok
5.4.4	Publication of technical magazines, newsletters etc.	Department published E-Magazine annually **https://ies.ipsacademy.org/e-magazine/**	Seen & Found ok
6	**Governance, Leadership and Faculty Empowerment Strategies**	--	
6.1.1	Governance and leadership are in accordance with the vision and mission and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance	Governance and leadership are in accordance with the vision and mission of department aligned with NEP 2020	Seen & Found ok
6.2.1	Committees in place and members: Advisory board, BoS Purchase, Grievance etc.	Department having following committee • Board of Studies • Advisory Committee • Purchase Committee	Seen & Found ok
6.3.1	Performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression	Performance appraisal system available on CMS (Computer Management System) 360° Feedback Form filled by Faculty & Staff Appraisal File Attached	Seen & Found ok
6.3.2	Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies	0 11 Faulty Member File Attached	Seen & Found ok
6.3.3	International/National Conferences, symposiums, seminars, research conclaves, workshops, FDPs, STTP, Trainings, Orientation / Induction	File Attached	Seen & Found ok

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	Programs, Refresher Course etc. attended		
6.3.4	International/National Conferences, symposiums, seminars, research conclaves, workshops, FDPs, STTP, Trainings, Orientation / Induction Programs, Refresher Course etc. Conducted	01- Entrepreneurship Skill Development Program (ESDP) 01- Refresher Course 01- Induction Program File Attached	Seen & Found ok
7	**Values and Best Practices**		
7.1.1	Gender equity & sensitization in curricular and co-curricular activities	New course on Professional Ethics, Gender, Human Values, Environment and Sustainability introduced In all activities equal opportunities for students.	Seen & Found ok
7.2.1	Department Best Practices	• Well-equipped laboratories • Experienced Faculties • Frequent conduction of Value-Added Courses • In curriculum course of Python, IoT included • Regular industrial visits • Conduct Refresher Course for Faculties • Regular Expert lecture organized by external members like professors, Industry person ,Alumni etc.	Seen & Found ok
8	**Supporting staff contributions**		
8.1.1	Qualification and participation in academics	All supporting staff having ITI or Diploma holder and actively participated in academic activities Attached - File	Seen & Found ok
8.1.2	Filling and data record keeping	Records are maintain and updated	Seen & Found ok
8.1.3	House keeping	Dedicated team of Class 4 employees appointed for housekeeping	Seen & Found ok
8.1.4	Lab maintenance /office maintenance	Lab and office well maintain	Seen & Found ok
8.1.5	Staff sent for training/workshops/skill up gradation/qualification improvement	Staff send for computer training frequently	Seen & Found ok
9	**Other Important Aspects**		
9.1.1	Feedback taken from various stake holders (Passing out students, Alumni, Industry, Parent etc.)	Feedback from industry and alumni are collected through focused group meetings when they are at institute during expert Lecture Sessions, BoS-Academic Council and Department meetings Feedback File Attached	Seen & Found ok
9.1.2	Entrepreneurship Cell	Department representative of Institute innovation cell organized lecture on Entrepreneurship	Seen & Found ok

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		MSME incubation cell organized Hackathon every year Attached File	
9.1.3	Department Webpage	https://ies.ipsacademy.org/departments/mechanical-engg/	Seen & Found ok
9.1.4	Self-Learning	Students learn through participative learning	Seen & Found ok
10	**Reviewer's final comments on dept. strengths and scope for improvement**		

Strengths

- Experienced Faculty Members
- Good Student Faculty Ratio
- Admission status improved
- Well established lab in department
- Research Lab in the department

Weakness

- Less publication in department
- Less Industry Projects
- Collaboration with Industry
- Less number of Ph.D. in department

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Action Taken Report (ATR) based on previous audit

S. No.	Reviewer's comments	Remarks/ATR
1	Motivate Faculty for Ph.D.	Dr. Satish Raghuwanshi Completed Ph.D. in September 2024
2	Improve Research work	Two Faculty members got seed money for Research and developed prototype.
3	No Consultancies	At present no consultancy from Industry
4	Less Industry Projects	Try to collaborate industry for project

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MECHANICAL ENGG. DEPTT. HOD IPS A IES, INDORE

Head
IPS Academy
Institute of Engineering & Science

11/10/25

Dr. Basant Agarwal
Professor, SGSITS, Indore

ACADEMIC AUDIT
Academic Year 2024-25

Name of the Department: Computer Science and Engineering (CSE)
Date(s) of Audit: 13/10/2025

	Criteria	Comments	Reviewers Observations and comments
A	**Department Information**		
A1	Year of Establishment	1999	Verified
A2	NBA Accreditation Status	NBA Accredited (2017-2020 & 2020-2023 & 2023-2026)	Verified
A3	Dept. vision, mission, graduate attributes/goals clearly defined and its agreement with institute vision, mission and goals	**Vision:** Attaining global recognition in computer science and engineering education, research and training to meet the growing needs of the industry and society. **Mission:** M1: Provide quality education, in both the theoretical and applied foundations of computer science and train students to effectively apply this education to solve real-world problems. M2: Amplifying their potential for lifelong high-quality careers. Map Consistency of the Department Vision statement with institute Vision statement Map Consistency of the Department Mission statement with institute Mission statement	Vision and Mission are defined as per Institute Vision and Mission
A4	No. of UG intake and admission	UG intake :300 Admission:390	Verified Excellent Admission
A5	No. of PG programs in the department and admission	**NA**	-

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1	**Curricular Aspects**		
1.1.1	Curricular developed and implemented have relevance to local/national regional and global developmental needs	In accordance with the guidelines of UGC, AICTE and APSCHE, a board of studies is established comprising experts from reputable academic institutions and industries in the respective domain. These board members take into account input from alumni and industry professionals when shaping new syllabi or modifying existing ones. The curriculum is designed in alignment with the new National Educational Policy (NEP) 2020. **ANNEXURE 1.1.1**	Curriculum Developed and implemented with the AICTE new National Educational Policy (NEP) 2020.
1.1.2	Syllabus Content % (UG & PG): Employability/ entrepreneurship/ skill development PCC (Program Core Courses) Basis Sciences Honors and Minors courses Humanities Project Tutorials Department Elective Course Field projects / research projects / internships	Basic Science Courses: **12.05%** Engineering Science Courses: **11.45%** Humanities and Social Sciences including Management Courses: **6.02%** Professional Core Courses: **34.93%** Professional Elective Courses: **9.04%** Inter-disciplinary Foundation Courses: **2.41%** Skill Based Courses: **5.42%** Liberal Learning Courses: **1.81%** Inter-disciplinary Open Courses: **3.61%** Project: **13.25%** Mandatory Learning Courses: **Audit**	All categories are well defined
1.1.3	Syllabus in line with AICTE model curriculum	Syllabus is designed to meet the AICTE norms and standards, as well as the industry expectations and requirements. We aim to provide our students with the best quality education and training in computer science and engineering. We have also covers the new courses (i.e. Interdisciplinary Foundation Courses, Skill Based Courses, Liberal Learning Courses) to incorporate the NEP – 2020 policy.	Verified Syllabus is in line with AICTE NEP – 2020 policy
1.2.1	New courses introduced out of the total number of courses	No Change	-

1.3.1	Cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability and other value framework enshrined in Sustainable Development Goals and National Education Policy – 2020 into the Curriculum	**Human Values and Professional Ethics:** Semester – I : (HS01) Design Thinking Semester – II : (HS02) English Semester – III : (HS04) Entrepreneurship and Principles of Management Semester – III : (MLC01) Professional Laws, Ethics, Gender, Human Values and Harmony Semester – IV : (HS03) Innovation and Creativity Semester – IV : (MLC02Constitution of India Semester – V : (HS06) Humanities and Social Sciences Open Courses – II Semester – VI : (HS05) Humanities and Social Sciences Open Courses – I Semester – VI : (MLC04) Intellectual Property Rights **Environment and Sustainability:** Semester – V : (MLC03)Environmental Studies **Gender equity:** Semester – III : (MLC01) Professional Laws, Ethics, Gender, Human Values and Harmony	Verified Cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability
1.3.2	Number of certificate/value added courses/Diploma Programs offered Online courses of MOOCs, SWAYAM/e-PG Pathshala/ NPTEL and other recognized platforms	**Value Added Courses:** 02 1. Honors Certification in Artificial Intelligence & Machine Learning (AI & ML) https://ies.ipsacademy.org/honors-scheme-syllabus/ 2. Minor Certification in Computer Science & Engineering https://ies.ipsacademy.org/minor-scheme-syllabus/ AWS Course Completed: 209 Professional Certification Course (Udemy, IBM, Coursera etc.): 2081 **ANNEXURE 1.3.2**	Verified Excellent Number of certificate value added courses

1.3.3	Is the program have the components of field projects / research projects / internships	**Project Offered in :** Semester - VI : (PROJ-CS601) Project-I Semester – VII : (PROJ-CS701) Project-II Semester – VIII : (PROJ-CS801) Project-III **Internship Offered in :** Semester - VI : (PROJ-CS602) Evaluation of Internship-I Semester - VII : (PROJ-CS702) Evaluation of Internship-II **ANNEXURE 1.3.3**	Verified Internships and Project included in the curriculum
1.3.4	Faculty course files containing handouts assignments tutorial sheet, question bank, list of resources/reference materials etc.	1.Vision Mission of the Department 2. PEOs (Program Education Objectives) 3. POs (Program Outcomes) / PSOs (Program Specific Outcomes) 4. COs + CO-PO mapping + CO-PSO mapping. 5. Individual Time Table 6. Syllabus 7. Lecture Plan + Content beyond syllabus (if any) 8.Attendance 9.Tutorial Sheet 10. Home Assignments + Quiz given to Students + Marked Home Assignments copies (2 best, 2 average) 11. MST - I & II Question Papers along with solutions + MST Copies (2 best, 2 average) + MST marks 12. End Semester Question Paper (last 3 Year) 13. Internal Evalution Sheet 14. End Semester Examination Result 15. Assessment of COs/POs/ PSOs + Course end survey 16. Course Material	Verified Faculty course files containing handouts assignments tutorial sheet etc.
1.3.5	Lab manuals/handouts/SOP	1.List of Experiments 2. Valued Lab Reports (Journal) (2 best, 2 average) 3. Practical Grade Sheet	Verified
1.3.6	Syllabus revision frequency: UG PG	BoS Meeting conducted to review the syllabus.	Check BoS Minutes of Meeting and Verified
1.4.1	Structured feedback for curriculum and its transaction is regularly obtained from stakeholders like Students, Teachers, Employers, Alumni, Academic peers etc	Collect the feedback from the stakeholders regarding curriculum to improve the teaching- learning process, and to enhance the satisfaction and outcomes of the learners. **ANNEXURE 1.4.1**	Verified feedbacks

VSC

2	**Teaching-Learning and Evaluation**		
2.1.1	Enrolment percentage Number of seats filled (Only first year admissions to be considered) Number of sanctioned seats	Sanctioned Seats : 300 Number Of Admission : 390 Enrolment Percentage : 100% **ANNEXURE 2.1.1**	Excellent Enrolment Percentage
2.1.2	Number of actual students admitted from the reserved categories (SC, ST, OBC etc.) in the first year Number of seats earmarked for reserved category as per GoI/State Govt. rule	Number of actual students admitted from the reserved categories SC : 27 ST:03 OBC: 144 EWS: 37 TFW:15 Number of seats earmarked for reserved category as per GoI/State Govt. rule SC : 36 ST : 45 OBC : 32 EWS : 22	Verified from the DTE list
2.2.1	Learning levels of the students and organizes special Programs to cater to differential learning needs of the student	We have groomed students as per slow and advanced learners. ANNEXURE 2.2.1	Verified different activities for slow and advanced learners
2.2.2	Student - Full time teacher ratio	STR: 18.53	Good Student - Full time teacher ratio
2.3.1	Student centric methods used for enhancing learning experience ICT- enabled tools including online resources for effective teaching and learning process	PowerPoint Presentation, NPTEL Lectures, Spoken Tutorial Project based Learning, MOOC, Swayam, Online Lectures etc. N/A	Video Lectures recorded through excellent E-learning studio

IQAC

2.3.2	Mentor-Mentee Schemes to address academics and student-psychological issues	Mentoring mentee program at the IPS Academy, Institute of Engineering and Science is a structured programme in which each faculty is assigned with the task of mentoring about 20-30 students. Mentors meet the group of students at least once in a month. They have to continuously monitor, counsel, guide, and motivate the students in all academic matters etc. ANNEXURE 2.3.2	Verified Mentor Mentee Schemes
2.3.3	Preparation and adherence of Academic Calendar and Teaching plans	The institution prepares the academic calendar every year in advance. The coverage of the academic calendar covers the list of examination dates, events, workshops and industrial visits, holidays, vacation dates, festivals, etc. The concerned faculties prepare a teaching plan for their respective subjects to adhere to the calendar. All MST, Exams etc. conducted as per Academic Calendar. ANNEXURE 2.3.3	Institute and Department Academic calendar are exist
2.4.1	Number of full time teachers appointed against the sanctioned posts	No. of Full Time Faculty: 32 ANNEXURE 2.4.1	Verified
2.4.2	Full time teachers with Ph.D.	ANNEXURE 2.4.1	Need to Improve number of Ph.D faculties
2.4.3	Total teaching experience of full-time teachers (in number of years)	No. of Full Time Faculty: 32 Total Exp.: 286 Years Avg Exp.: 8.94 Years (in the same Institute) ANNEXURE 2.4.3	Good

2.4.4	Number of full time teachers who have been working in the organization continuously during the entire assessment period	No. of Full Time Faculty continuously during the entire assessment period : 32 ANNEXURE 2.4.4	Excellent
2.4.5	Number of PhDs pursuing faculty	Number of Ph.Ds Pursuing Faculty: 14 ANNEXURE 2.4.5	Satisfactory
2.4.6	Faculty Cadre	ANNEXURE 2.4.4	Need to Improved
2.4.7	Faculty Retention with respect to CAYm2	No of Faculty Retained: 31 Total No. of Required Faculty: 32 % of Faculty Retained: 96.87	Good Faculty Retention
2.4.8	Full time adjunct faculty in the department	NIL	-
2.4.9	Part time adjunct faculty in the department	NIL	-
2.4.10	Faculty/Industry People Invited in co-teaching	NIL	Need to Improved
2.4.11	JRF/SRF/TA/RA in the department	NIL	-
2.5.1	Number of days from the date of last semester-end/ year-end examination till the last date of declaration of results	Average Days for Result Declaration: 23 ANNEXURE 2.5.1	Good Average Days for Result Declaration
2.5.2	Number of Student complaints/grievances about evaluation	NIL	-

2.5.3	IT integration and reforms in the examination procedures and processes Improvement in Examination Management System (EMS) of the institution	As the institute got the Autonomy a new module is needed for the smooth conduction of end semester examination that can perform all the basic tasks from student exam, form fee, submission to result declaration along with marksheet printing. Hence, the institution examination module has developed and is running successfully. **Institute Examination module** a. Exam Time Table b.Student exam form forwarding and online exam form fee submission c. Student Admit Card d.RABA for Student records e-Filing marks & calculating results f. Generating TR (Tabular Results) g. Declaration of Result h. Generating Physical Marksheets i. Generating PD (Provisional Degrees) & Migrations j. Reprinting k. ATKT l. Transcript m. Remuneration n. Summer Term	Excellent examination procedures and processes
2.5.4	Exam Evaluation Scheme: Theory Practical Audit of question papers through experts External examiners participation in practical evaluation Open Book Exams Comprehensive viva voice exam	1. Theory - Evaluate using ESE and CIE (70:30 / 60:40) 2. Practical Evaluation by ESE and CIE (60:40). One external member is appointed as an examiner 3. Audit of question papers done through Moderators. https://ies.ipsacademy.org/academic-rules-regulations/	Verified from the Institute Academic Rules and Regulation (ARR)

2.6.1	CO-PO Assessment	**Final CO attainment** = 0.7 ESE + 0.3 COI where, ESE is CO Attainment through End Semester Examination COI is CO Attainment through internal assessments The assessment results obtained above may or may not be rounded off to the nearest integer. **Note : (The above procedure is to be repeated for all COs in the respective subjects.)** **PO attainment:** **Direct attainment (POD)** is obtained as the average of entries (without rounding off to the nearest integer) in the columns corresponding to each PO in the program articulation matrix. **Indirect attainment (POI)** is determined based on the Student Exit Surveys, Alumni Surveys, Employer Surveys, Co-curricular and extracurricular activities on a scale of 1-3. **Final PO attainment** = 0.8xPOD+0.2xPOI ANNEXURE 2.6.1	Verified Excellent Academic Portal for NBA Assessment
2.6.2	Pass percentage of students (excluding backlog students)	99.06 %	Excellent
2.6.3	DUPC-DPPC: UG, PG	The institute is affiliated to Rajiv Gandhi Proudyogiki Vishwavidyalaya (RGPV), Madhya Pradesh, Bhopal. The institute became autonomous from the session 2020-2021 approved by UGC. The curriculum is updated by the institute itself in BoS twice a year. Course outcomes are designed and finalized by the DUPC committee.	DUPC exist
2.6.4	Quality of Students projects and relevance to specialization UG & PG	Student projects are selected based on the ideas of the students, relevance of the subject and the ability of the batches. Faculty assist students in formulating their ideas design of components and development. An annual event Competition- UDAAN under CSI is conducted every year in which students demonstrate their Major and Minor projects and the experts from industries evaluate student projects on following criteria: usability, functionality, GUI, presentation. Both major and minor project winners are given ca sh prizes and certificates. ANNEXURE 2.6.4	Quality of Project has been assessed from Industry experts

2.7.1	Online student satisfaction survey regarding the teaching learning process.	An online feedback is taken from students and is analyzed by obtaining weighted averages for each of the attributes/ parameters. Overall weighted average is also obtained. If the weighted average of one or more parameters is less than 3, it is presumed that the institute is required to take corrective action. The nature of corrective action to be taken depends upon the parameter/ attributes. The calculation of weighted averages is illustrated in the attached file.	Verified
3	**Research, Innovations and Extension**		
3.1.1	Research facilities are frequently updated Policy for promotion of research which is uploaded on the institutional website and implemented	https://ies.ipsacademy.org/wp-content/uploads/2016/12/Research-Policy-Revised.pdf	Good Policy verified from institutional website
3.1.2	Amount of seed money provided by institution to its teachers for research	NIL	Initiative should be taken
3.1.3	Number of teachers receiving national/ international fellowship/financial support by various agencies for advanced studies/ research	NIL	Initiative should be taken
3.2.1	Research funding received by the institution and its faculties through Government and non-government sources	NIL	Initiative should be taken
3.2.2	Number of research projects per teacher	NIL	-
3.2.3	Number of teachers recognized as research guides	NIL	Initiative should be taken

3.2.4	Faculty applied for research funding	NIL	Initiative should be taken
3.3.1	Awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same (IPR like Patent etc.)	Innovation, Incubation and Startup Policy are existing	Patents should be applied
3.4.1	Code of Ethics for research and the implementation	https://ies.ipsacademy.org/wp-content/uploads/2016/12/Research-Policy-Revised.pdf	Good Policy verified from institutional website
3.4.2	Number of candidates registered for Ph. D per teacher	N.A.	Initiative should be taken
3.4.3	Number of research papers published in the Journals as notified on UGC CARE list	14 ANNEXURE 3.4.3	Need to improve
3.4.4	Number of books and chapters in edited volumes published	Chapter:01 Books:05 ANNEXURE 3.4.4	Need to improve
3.4.5	Average Citation index in Scopus/ Web of Science	35.66	Need to improve
3.4.6	Scopus/ Web of Science – h-index	1.44	Need to improve

3.4.7	Faculty publication in reputed conferences	7	Need to improve
3.4.8	Faculty publication ratio (UGC CARE list Journals)	0.44	Need to improve
3.5.1	Revenue generated from consultancy and corporate training	NIL	Initiative should be taken
3.6.1	Extension activities in sensitizing students to social issues and holistic development	Various activities have been conducted: 1. Amrit Kalsh Yatra and its Importance 2. Drug De-Addiction Campaign by Skit Play 3. Debate on "One Nation One Election 4. Voter Awareness Session 5. Quiz Competition on The Constitution of India 6. Session on Constitution of India 7. Blood Donation Camp 8. National Youth Day Celebration 9. Republic Day 10. World Women Day 11. World Health Day 12. Fire Service Day Celebration 13. World Earth Day 14. World Environment Day Celebration ANNEXURE 3.6.1	Excellent Extension activities for social issues and holistic developme-nt
3.6.2	Number of extension and outreach programs conducted through organized forums including NSS/NCC with involvement of community	1. Different activities organized by NSS/NCC 2. Rural Outreach Program ANNEXURE 3.6.2	Good Number of Activities are organized under NSS/NCC
3.7.1	Faculty industry connect: Number of functional MoUs Number of industries visited by faculty	One MoU has been Functional 1. Inspark Technologies, Indore	Initiative should be taken for industrial visit by faculty

3.7.2	Industry participation in funded projects : Co-teaching details for each course:	NIL	Initiative should be taken
3.7.3	Faculty travelled abroad/in country for collaboration	NIL	Initiative should be taken
4	**Infrastructure and Learning Resources**		
4.1.1	No. of classrooms Laboratories Computing equipment ICT – enabled facilities such as smart class, LMS etc. Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc.	No. of classrooms:12 (ICT Enabled) No. of Laboratories: 10 Computing Equipment: 727 PC	Verified, ICT enabled classroom are exist and LAB with good configurati-on system
4.1.2	Expenditure excluding salary, for infrastructure development and augmentation	We have 10 Laboratories with excellent configuration of computer and other equipment	Verified

<table>
<tr><td>4.1.3</td><td>Equipments and facilities available and their status:

Log book status

Software

Modeling and computational tools and facilities

Incubation Labs</td><td>➢ Log book maintained in each labs
➢ Number of Software : 21</td><td>Check and verified log book, Software</td></tr>
<tr><td>4.1.4</td><td>Industry sponsored labs</td><td>NIL</td><td>Initiative should be taken</td></tr>
<tr><td>4.1.5</td><td>New lab/equipments added

New software added

MODROBS Sanctioned

Testing Lab</td><td>Equipments Purchased</td><td>Verified from the budget file</td></tr>
<tr><td>4.1.6</td><td>Virtual Lab Development</td><td>NIL</td><td>-</td></tr>
<tr><td>4.2.1</td><td>Library facilities

The library is optimally used by the faculty and students</td><td>The library has wide range of Engineering, Technology and Science resources. It includes-
<table>
<tr><th>S.N.</th><th>Item</th><th>Number</th></tr>
<tr><td>1</td><td>Number of Books</td><td>42702</td></tr>
<tr><td>2</td><td>Number of e-Books</td><td>72147</td></tr>
<tr><td>3</td><td>Number of Print Journals (Indian/International/ Periodical)</td><td>04</td></tr>
<tr><td>4</td><td>Local News Papers in English and Hindi</td><td>12</td></tr>
<tr><td>5</td><td>Magazines</td><td>09</td></tr>
<tr><td>6</td><td>CD/DVDs</td><td>2673</td></tr>
<tr><td>7</td><td>NPTEL courses</td><td>1068</td></tr>
<tr><td>8</td><td>Ethical Books</td><td>634</td></tr>
<tr><td>9</td><td>e-journals</td><td>59193</td></tr>
</table></td><td>Verified</td></tr>
</table>

4.2.2	Expenditure for purchase of books/ e-books and subscription to journals/e-journals	Total Expenditure: 1935662/- (Document Enclosed)	Verified
4.3.1	IT facilities and sufficient bandwidth for internet connection	1 Gbps	Verified Good Internet Speed
4.3.2	Student - Computer ratio	1:1	Excellent
4.3.3	Audio visual centre, mixing equipment, editing facility, media studio, lecture capturing system(LCS) and related hardware and software for e-content development	A-View Setup and Lecture capturing system (LCS) are available in Department and Institute respectively. https://www.youtube.com/watch?v=jMODNqy80ZA&list=PLXy72hIIdE2tW-tzvaFTOeJrV9mNcKRFG ANNEXURE 4.3.3	Verified A-View setup, Lecture capturing system
4.4.1	Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component	Time to time expenditure increases ANNEXURE 4.4.1	Verified
4.4.2	Procedures for maintaining and utilizing physical and academic support facilities – laboratory, library, sports complex, computers, classrooms etc .	1. 10 well equipped laboratory 2. Classrooms are equipped with the required teaching aids to supplement the teaching-learning process ANNEXURE 4.4.2	Maintenance Procedure are well documented

5	**Student Support and Progression**		
5.1.1	Number of students benefited by scholarships and freeships provided by the institution government and non-government bodies, industries, individuals, philanthropists	Total 448 students benefited from various scholarships. ANNEXURE 5.1.1	Verified as per the document
5.1.2	Efforts taken to provide career counseling including e-counseling and guidance for competitive examinations	Career Counseling assists students in acquiring appropriate career guidance and placements at the right time. Team of career Management Group (CMG), Mentor-Mantee system helps student for career counseling.	Career counseling Cells are exits
5.1.3	Capacity development and skills enhancement activities are organized for improving students' capability	Various Capacity development and skills enhancement activities are organized for students. Details are enclosed. ANNEXURE 5.1.3	Need to Improve
5.1.4	Redressal of student grievances including sexual harassment and ragging cases	The Institute has a Grievance Redressal mechanism to redress the grievance of student, academic and non-academic staff members. Students include all UG, PG, and Research scholars. No cases found in 2024-25. https://ies.ipsacademy.org/wp-content/uploads/2024/12/Grievance_Redressal_Mechanism-DARC-2024-25.pdf	Good Redressal cells are managed and implemented

5.1.5	Student Performance: Passing out in first attempt % Student scoring first class (>6.5 CGPA) No. of UG Students Graduating/ed in 4 years No. of UG Students Graduating/ed in more than 4 years No. of PG Students Graduating/ed in 2 years No. of PG Students Graduating/ed in more than 2 years	Total Students : 212 Student scoring first class (>6.5 CGPA) : 200 No. of UG Students Graduating/ed in 4 years : 210	Excelled Student Performance
5.1.6	Result Analysis (UG & PG Pass Out Performance) Students with CGPA 10 Students with CGPA 9 to <10 Students with CGPA 8 to <9 Rest all UG,PG	Total Students : 212 Students with CGPA 10 : 00 Students with CGPA 9 to <10 : 21 Students with CGPA 8 to <9 : 53	Excelled
5.1.7	UG/PG (Co/extra-curricular activities)	Details of activity are enclosed ANNEXURE 5.1.7	Excellent
5.1.8	Student industrial internships	Details of activity are enclosed (241 Students) ANNEXURE 5.1.8	Excellent

5.1.9	Student publications	NIL	Initiative should be taken
5.1.10	Student Startups	NIL	Initiative should be taken
5.1.11	Innovative Product/Prototype Developed by Students : Prototype Developed Product Developed Product+Prototype Developed	Campus Active Software: Campus Active software has designed by Institute of Engineering & Science, IPS Academy Indore. Campus Active provides web applications development rooted in creativity and founded in technical expertise. Details of modules are attached.	Excellent inhouse software developme-nt cell
5.2.1	Number of students placed and package received (Min. and Max.) Number of students progressing to higher education	Max: 6 LPA Min: 3 LPA Avg: 2.35 LPA Higher Studies: 7 ANNEXURE 5.2.1	Verified Need to Improve
5.2.2	Number of students qualifying in state/ national/ international level examinations (eg: GATE/NET/SLET/ Civil Services/State government examinations etc.)	Total number of students qualified in national/international examinations:10 ANNEXURE 5.2.2	Verified Need to Improve
5.3.1	Number of awards/medals for outstanding performance in sports/cultural activities at University / state /national / international Level events	Details are attached for sports/cultural ANNEXURE 5.3.1	Good Number of activities in various categories

5.3.2	Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the department/institution	We have formed a student council in which 5 students from second year to final year (total 15 students) have been selected.	Verified
5.3.3	Organizes following activities: Sports competitions/evens Cultural competitions/evens Technical fest/Academic fest Any other events through Active clubs and forums	Organizes different Sports competitions, Culture events and Project competition "Udaan" ANNEXURE 5.3.3	Good Number of activities in various Cells, Project Competition is appreciable
5.4.1	Alumni contribution to the institution through registered Alumni association	We have registered Alumni Association number 03/27/01/23952/21 dated 29/12/2021. Alumni meet organized once in a year.	Verified, Alumni cell are exist
5.4.2	Alumni contributes and engages significantly to the development of institution through academic and other support system	We conduct the Board of Studies(Bos) Meeting once in a year in which Mr. Mustaffa Murabbi,2003 alumnus,CEO Canopus system, Indore & Mr. Parth Jha, E-bay system, 2012 alumnus, are active members of BOS.	Verified
5.4.3	Professional Societies/Chapter and organizing events	The IPS Academy, Institute of Engineering and Science, Indore CSI Student Chapter was formed in Year 2011 in the spirit of providing students resources and contacts needed for the enhancement of their professional development. Details of events organized under CSI student chapter for session 2024-25 in annexure. ANNEXURE 5.4.3	Verified CSI institutional membership and activities

5.4.4	Publication of technical magazines, newsletters etc.	Every year we publish the technical magazine "**Boot of Computer".** Editors are: **Faculty:** Ms. Neha Yadav Mr. Sumit Devray **Student:** Rohan Verma (0808CI221157) 3rd Year Mohit Rathore (0808CI221122) 3rd Year Savan Lovanshi (0808CS221187) 3rd Year Anushka Yadav(0808CS231038) 2nd Year Yash Vaswani (0808CS231232) 2nd Year Sejal Jain (0808CS231178) 2nd Year	Seen technical magazine
6	**Governance, Leadership and Faculty Empowerment Strategies**		
6.1.1	Governance and leadership are in accordance with the vision and mission and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance	The Governance of the IPS Academy, Institute of Engineering and Science is a reflection of successful leadership in tune with the vision and mission of the institution as it includes all the stakeholders. ANNEXURE 6.1.1	Verified Various Cells are exists
6.2.1	Committees in place and members: Advisory board, BoS Purchase, Grievance etc.	BoS and Advisory board meetings are conducted once in a year, Purchase and Grievance exist. ANNEXURE 6.2.1	Verified

6.3.1	Performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression	Follows well-defined appraisal system for teaching and non-teaching staff 360 degree score of faculty shall be determined on the basis of following factors: Annexure I 1.Teaching Process 2.Student's feedback 3.Departmental activities 4.Institute activity 5.Contribution to the society Annexure II – Research and Academic Contribution Annexure III – Self Assessment of Participation in Research & Academic Contribution Annexure IV – Annual Confidential Report	Verified Performance appraisal system are exists
6.3.2	Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies	Number of teachers provided with financial support = 12 ANNEXURE 6.3.2	Verified, Need to Improve
6.3.3	International/National Conferences, symposiums, seminars, research conclaves, workshops, FDPs, STTP, Trainings, Orientation / Induction Programs, Refresher Course etc. attended	Different Type of Program attended by faculty Members ANNEXURE 6.3.3	Excellent
6.3.4	International/National Conferences, symposiums, seminars, research conclaves, workshops, FDPs, STTP, Trainings, Orientation / Induction Programs, Refresher Course etc. Conducted	Number of Event Conducted = 03 (One International conference, Two Refresher Course) ANNEXURE 6.3.4	Verified records

7	**Values and Best Practices**		
7.1.1	Gender equity & sensitization in curricular and co-curricular activities	Safety, security and well-being, along with gender equity and friendly working atmosphere are the issues of prime concern to IES. Gender sensitivity is an inherent value in the cultural ethos of the institute and its neighboring community, as is evident by the following facilities: a) Safety and Security b) Counseling c) Other Measures	Taken care of gender equity through various cells
7.2.1	Department Best Practices	1. In-house Software Development(Campus active) 2. Spoken Tutorial Resource Center with 4 star rating(Bombay) 3. NPTEL E-Library 4. UDAAN Project Competition 5. AICTE 360 Degree Feedback 6. CSI Student Chapter 7. AWS Academy 8. Student Club 9. Red Hat Academy	Good efforts are taken to implement best practices
8	**Supporting staff contributions**		
8.1.1	Qualification and participation in academics	Number of Supporting staff = 09 Supporting staff of the department are associated with different labs and office related activities.	Verified
8.1.2	Filling and data record keeping	Data record keeping in online and offline	Verified
8.1.3	House keeping	Exists housekeeping	Verified
8.1.4	Lab maintenance /office maintenance	Lab maintenance system services and software updation time to time	Verified record of Lab maintenance
8.1.5	Staff sent for training/workshops/ skill up gradation/qualification improvement	NIL	Verified Staff skill up gradation system exists

9	**Other Important Aspects**		
9.1.1	Feedback taken from various stake holders (Passing out students, Alumni, Industry, Parent etc.)	We collect various feedbacks from the stakeholders	Verified Feedback System exists
9.1.2	Entrepreneurship Cell	https://ies.ipsacademy.org/institutions-innovation-council/	Verified
9.1.3	Department Webpage	Institute Website is Developed and Maintained by Student and Faculties https://ies.ipsacademy.org/departments/computer-science-engg/	Verified Website is well maintained and a departmental web page exists and appreciable efforts done by faculties and students.
9.1.4	Self-Learning	1. Spoken Tutorial Resource Center with 4 star rating(Bombay) 2. NPTEL E-Library 3. MOOC Courses	Verified

10	**Reviewer's final comments on dept. strengths and scope for improvement**	1. In question Papers, PI should be included 2. Adjunct Faculty should be invited/ appointed 3 Effort should be made to invite industry experts as co-teachers. 4. In Mentor-Mentee meeting action taken should be mentioned for students request	

Strengths:

1. Excellent Admission.
2. RedHat Academy, AWS Academy and Spoken Tutorial
3. Good Faculty Retention.
4. Excellent Inhouse Software Development cell.
5. Good Infrastructure and Facilities for student's overall grooming.

Weakness:

1. Less number of Ph.D & Ph.D Pursuing faculties in Department.
2. Need to invite more industry people for co-teaching.
3. More research publications should be in Scopus/SCI Journals.
4. Need to improve in consultancy, research project.
5. More functional MoUs

13.10.25
(Dr. Urjita Thakar)

Academic and Administrative Audit (AAA)
Academic Year 2024-25
(01 July 2024 to 30 June 2025)

Name of the Department: Chemical Engineering, IPS Academy, Institute of Engineering & Science, Indore

Date of Audit: 17/10/2025, Friday

	Criteria	Comments	Reviewers Observations and comments
A	**Department Information**		
A1	Year of Establishment	2004	Doing academic excellence since 2004.
A2	NBA Accreditation Status	UG Accredited by NBA New Delhi during 2017-2020, Applied for the CAY 24-25.	Applied in Tier-I as per new guidelines. Well prepared SAR.
A3	Dept. vision, mission, graduate attributes/goals clearly defined and its agreement with institute vision, mission and goals	Department Vision & Mission, graduate attributes/goals are well defined in adherence with the same of the Institute.	Suitable process was used to framed the same. Properly placed at various locations in dept. & Institute.
A4	No. of UG intake and admission	Intake-30, Admission-20	Admissions are increased as compared to last year. At present it is 90%.
A5	No. of PG programs in the department and admission	No. of PG Program-01 Admission-03	Try to attract (2025-26) students from core and allied branches. Needs improvement
1	**Curricular Aspects**		
1.1.1	Curricular developed and implemented have relevance to local/national regional and global developmental needs	Mathematics syllabus may reform as per requirement of chemical engineering.	Prepared as per NEP. Allow students to take mooc/NPTL courses related to new/current requirement e.g. AI/ML, sustainability etc.

1.1.2	Syllabus Content % (UG): **UG** **PG**		It is well prepared as per NEP guidelines and University structure (2018) Overall %. of course (core) are slightly less. Prepared as per NEP and university. If possible, implement semester/ year long internship/ project at industry or other institute.
1.1.3	Syllabus in line with AICTE model curriculum	Yes, We follow the AICTE MODEL CURRICULUM 2018.	As per AICTE
1.2.1	New courses introduced out of the total number of courses	No New Courses have been added.	If possible, include AI/ML related courses to increase employability of students.

Syllabus Content % (UG) **Category**	**UG Actual Breakup of credits**
Humanities & Social Sciences Management Courses (HSMC)	10 (6.02 %)
Basic Science Courses (BSC)	20 (12.04 %)
Engineering Science Courses (ESC)	19 (11.44 %)
Professional Core Courses (PCC) including Tutorial	60 (34.93 %)
Professional Elective Courses (PEC)	16 (9.63 %)
Inter-disciplinary Foundation Courses (IFC)	4 (2.40 %)
Skill Based Courses (SBC)	8 (4.81 %)
Liberal Learning Courses (LLC)	2 (1.80 %)
Inter-disciplinary Open Courses (IOC)	6 (3.6 %)
Project	15 (9.03 %)
Mandatory Learning Courses (MC)	No Credit

Syllabus Content % (PG): **Category**	**PG Actual Breakup of credits**
Program specific elective course(PSEC)	12 (17.14%)
Program specific core course (PSCC)	24 (34.28 %)
Skill Based Courses (SBC)	26 (37.14 %)
Mandatory Learning Courses (MLC)	4 (2.8 %)
Audit Course (AUC)	No Credit
Open Elective Course (OEC)	3 (4.28 %)
Liberal Learning Courses (LLC)	1(1.4 %)

<table>
<tr><td>1.3.1</td><td>Cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability and other value framework enshrined in Sustainable Development Goals and National Education Policy – 2020 into the Curriculum</td><td>ANNEXURE 1.3.1
<table><tr><th>Cross-cutting issues</th><th>UG</th><th>PG</th></tr><tr><td>Professional Ethics</td><td>5</td><td>6</td></tr><tr><td>Gender</td><td>1</td><td>1</td></tr><tr><td>Human Values</td><td>6</td><td>3</td></tr><tr><td>Environment and Sustainability</td><td>3</td><td>3</td></tr></table></td><td>Relevant courses are included as per NEP.</td></tr>
<tr><td>1.3.2</td><td>Number of certificate/value added courses/Diploma Programs offered Online courses of MOOCs, SWAYAM/e-PG Pathshala/ NPTEL and other recognized platforms</td><td>01 value added courses offered.
Aspen Plus</td><td>Few more courses may be offered.</td></tr>
<tr><td>1.3.3</td><td>Is the program have the components of field projects / research projects / internships</td><td>YES. The curriculum has inclusion of field projects/research projects/internships as per AICTE specifications.</td><td>Real problem based few projects/research/ internship components are observed.</td></tr>
<tr><td>1.3.4</td><td>Faculty course files containing handouts assignments tutorial sheet, question bank, list of resources/reference materials etc.</td><td>Course files are maintained by the faculty members who are teaching the course in each semester.</td><td>Well prepared and maintained all records.</td></tr>
<tr><td>1.3.5</td><td>Lab manuals/handouts/SOP</td><td>Lab Manuals are available in respective Labs</td><td>Prepared and maintained as per NEP.</td></tr>
<tr><td>1.3.6</td><td>Syllabus revision frequency:
UG
PG</td><td>BoS meeting organized regularly and syllabus revision is done as per need.</td><td>Regulary organized and implemented the suggestion.</td></tr>
<tr><td>1.4.1</td><td>Structured feedback for curriculum and its transaction is regularly obtained from stakeholders like Students, Teachers, Employers, Alumni, Academic peers etc</td><td>The department maintains curriculum feedback from all stakeholders in online/offline mode.</td><td>Well defined feedback Process is available and regulary obtained from stakeholders.</td></tr>
<tr><td>2</td><td>Teaching-Learning and Evaluation</td><td></td><td></td></tr>
<tr><td>2.1.1</td><td>Enrolment percentage
Number of seats filled (Only first year admissions to be considered)
Number of sanctioned seats</td><td>B. Tech- 20/30=66%

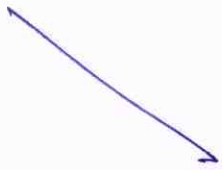
M. Tech -3/9=33%</td><td>For year 2024-25 ⇒ 66%, and for 2025-26 ⇒ 90%. Needs improvement for PG.</td></tr>
<tr><td>2.1.2</td><td>Number of actual students admitted from the reserved categories (SC, ST, OBC etc.) in the first year
Number of seats earmarked for reserved category as per GoI/State Govt. rule</td><td><table><tr><th>Year</th><th colspan="5">Number of students admitted from the reserved category</th></tr><tr><th></th><th>SC</th><th>ST</th><th>OBC</th><th>Gen</th><th>Others</th></tr><tr><td>UG</td><td>2</td><td>0</td><td>3</td><td>14</td><td>0</td></tr><tr><td>PG</td><td>0</td><td>0</td><td>2</td><td>2</td><td>0</td></tr></table></td><td>Followed the guidelines of M.P. Goverment Reservation policy.</td></tr>
<tr><td>2.2.1</td><td>Learning levels of the students and organizes special Programs to cater</td><td>Department focuses on imparting</td><td></td></tr>
</table>

	to differential learning needs of the student	learning to students through participative, experiential and peer learning methods etc. Advance and Slow learners are indentified and measures are taken to cater needs of both levels of students. Department organizes following program for students like Software Training, Industrial Visit, ENGROSSER – National Level Technical Paper writing Competition , INNOVITA – Technical Fest. (The data is enclosed in the Advance slow learner Annexure 2.2.1)	Students are participated in related activities for the improvements Also relevant skill development programs may be conducted inhouse / outside.
2.2.2	Student - Full time teacher ratio	12:1	Very good (as per students admitted)
2.3.1	Student centric methods used for enhancing learning experience ICT- enabled tools including online resources for effective teaching and learning process	• Participative Learning • Experiential Learning • Problem solving method (The data is enclosed in the Annexure 2.3.1)	Promoted for relevant activities. It is available in institute.
2.3.2	Mentor-Mentee Schemes to address academics and student-psychological issues	Mentor-Mentee scheme is available and practiced regularly. 3 to 4 mentees are assigned to one mentor every year.	Well defined process is followed.
2.3.3	Preparation and adherence of Academic Calendar and Teaching plans	Department Activity Calendar and Teaching Plans are prepared in adherence with the Institute Academic Calendar.	All academic and other activities as per Academic calendar.
2.4.1	Number of full time teachers appointed against the sanctioned posts	9	Sufficient no. of faculties.
2.4.2	Full time teachers with Ph.D.	05	Good number
2.4.3	Total teaching experience of full-time teachers (in number of years)	Average teaching experience of teachers is. 12.81 years	Well experienced.
2.4.4	Number of full time teachers who have been working in the organization continuously during the entire assessment period	9	Good number
2.4.5	Number of PhDs pursuing faculty	03	Good initiative
2.4.6	Faculty Cadre	Professor-02	

		Associate Professor-03 Assistant Professor-04	Course structure is good.
2.4.7	Faculty Retention with respect to CAYm2	100%	100% retention
2.4.8	Full time adjunct faculty in the department		→ Identify the same
2.4.9	Part time adjunct faculty in the department	NIL	Not available
2.4.10	Faculty/Industry People Invited in co-teaching	Appointed 01 PoP fulltime having 30 years of industrial experience	01 appointed
2.4.11	JRF/SRF/TA/RA in the department	NIL	On the basis of research project
2.51	Number of days from the date of last semester-end/ year- end examination till the last date of declaration of results	Jul-Dec 2024 : 06 days Jan-May 2025 : 05 days	As per academic calander and days are sufficient.
2.5.2	Number of Student complaints/grievances about evaluation	NIL (Grievance Redressal Mechanism is available)	Nil
2.5.3	IT integration and reforms in the examination procedures and processes Improvement in Examination Management System (EMS) of the institution	ARR for Examination attached.	Academic rules and regulations have been implemented properly.
2.5.4	Exam Evaluation Scheme: Theory Practical Audit of question papers through experts External examiners participation in practical evaluation Open Book Exams Comprehensive viva voice exam	Theory evaluation Scheme comprises of HA (15) + MST(25) + ESE (60) = 100 Practical evaluation Scheme comprises of Internal (40) + ESE (60) = 100 Moderation of Question Paper is done. External Examiners are called for Practical Evaluation. Open Book Exam – YES. CVV -Yes	Overall exam evaluation schemes for all type of courses are well defined and balanced.
2.6.1	CO-PO Assessment	Direct /Indirect Assessment Process of CO-PO Assessment classified in to Direct Assessment and Indirect Assessment. **Direct Assessment** Class/assignment test, internal assessment tests, assignments, semester examinations, seminars, laboratory assignments/ practical, minor projects etc. **Indirect Assessment** Course Exit Survey	CO - PO assesment have been performed as per outcome based education, NBA guidelines.
2.6.2	Pass percentage of students (excluding backlog students)	100%	Excellent

2.6.3	DUPC-DPPC: UG, PG	DUPC-DPPC for UG & PG data attached in file.	All committees for UG & PG are working properly
2.6.4	Quality of Students projects and relevance to specialization UG & PG	Students are doing project relevant to chemical and environmental engineering problems. B. Tech – 11 projects M. Tech – 02 projects Quality of UG & PG students is assessed regularly	All projects quality is satisfactory and relevant to the chemical engg. & allied.
2.7.1	Online student satisfaction survey regarding the teaching learning process.	Collected at Institute Level [CM Students Analysis attached]	Performed at institute level.
3	**Research, Innovations and Extension**		
3.1.1	Research facilities are frequently updated Policy for promotion of research which is uploaded on the institutional website and implemented	https://ies.ipsacademy.org/wp-content/uploads/2016/12/Research-Policy-Revised.pdf	Further ~~need~~ improvements in facility is acquired. Also explore the possibility to colaborate with other dept./institutes.
3.1.2	Amount of seed money provided by institution to its teachers for research	2 Lakhs	Suggested for more grant.
3.1.3	Number of teachers receiving national/ international fellowship/financial support by various agencies for advanced studies/ research	NIL	Applied for funding.
3.2.1	Research funding received by the institution and its faculties through Government and non-government sources	NIL	Applied for funding.
3.2.2	Number of research projects per teacher	NIL	At present, nil.
3.2.3	Number of teachers recognized as research guides	03 faculties are recognized as research guide.	Available. three faculty members.
3.2.4	Faculty applied for research funding	04 faculties have applied for research funding from government agencies.	Applied (04)
3.3.1	Awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same (IPR like Patent etc.)	1 events for IPR awareness : Refresher Course on Intellectual Property Rights conducted by department during 16-20 June 2025.	All faculty members are aware of this having sufficient information for the same
3.4.1	Code of Ethics for research and the implementation	https://ies.ipsacademy.org/wp-content/uploads/2016/12/Research-Policy-Revised.pdf	Followed. and mentioned the same.

3.4.2	Number of candidates registered for Ph. D per teacher	~~03 candidates registered for PhD~~ NiL	Initiative must be taken to have recognized research cent.
3.4.3	Number of research papers published in the Journals as notified on UGC CARE list	06 Research papers	Needs improvement. Atleast 10 per ye.
3.4.4	Number of books and chapters in edited volumes published	Nil	Needs attention.
3.4.5	Average Citation index in Scopus/ Web of Science	146.35	Satisfactory. But still there is scope for improvement.
3.4.6	Scopus/ Web of Science – h-index	4.20	
3.4.7	Faculty publication in reputed conferences	1	
3.4.8	Faculty publication ratio (UGC CARE list Journals)	0.66	
3.5.1	Revenue generated from consultancy and corporate training	2.5 Lacs	Try to get more by consultancy from industry
3.6.1	Extension activities in sensitizing students to social issues and holistic development	Various extension activities like rural outreach, traffic awareness, voter awareness, blood donation camp, health checkups, NSS, NCC etc. are organized at institute and department level for sensitizing students to social issues and holistic development	Sufficient no. of activities are conducted.
3.6.2	Number of extension and outreach programs conducted through organized forums including NSS/NCC with involvement of community	12 activities	Good number of activities.
3.7.1	Faculty industry connect: Number of functional MoUs Number of industries visited by faculty	MoU- 02 Industry Visits - 1	Improvement in outcome of these activities is need attention.
3.7.2	Industry participation in funded projects : Co-teaching details for each course:	NIL	Try to get industry funded projects.
3.7.3	Faculty travelled abroad/in country for collaboration	01	Needs improvement.
4	**Infrastructure and Learning Resources**		
4.1.1	No. of classrooms Laboratories Computing equipment ICT – enabled facilities such as smart class, LMS etc.	03 08 26 All classes are smart classes & equipped with LCD Projector and CMS is used for LMS	Sufficient facilities and infrastructure to run UG & PG.

	Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc.	➢ 3 Audi (Available at Institute level for Cultural Activities) ➢ 2 Quadrangle & Central ground for outdoor games ➢ Student Section for indoor games and yoga activity	
4.1.2	Expenditure excluding salary, for infrastructure development and augmentation	Expenditure for infrastructure development and augmentation is available at institute level.	More funds should be alloted.
4.1.3	Equipments and facilities available and their status: Log book status Software Modeling and computational tools and facilities Incubation Labs	Projectors, Printers, WiFi, Departmental Library, Photocopy Machines, Personnel Faculty Cabin with PC's with LAN connection, Generator Smart TV, Wheel Chair available in department and are in working condition. Available at respective labs. 03 (DWSIM,SCILAB, ,Prodyne) Yes. Simulation Lab is well equipped with computational facilities and software's. NIL	Sufficient facilities.
4.1.4	Industry sponsored labs	NIL	Needs collaborations with industry.
4.1.5	New lab/equipments added New software added	NIL No new software purchased.	Focus more on free softwares.
4.1.6	Virtual Lab Development	No	Projects on VLD can be given.
4.2.1	Library facilities The library is optimally used by the faculty and students	YES ➢ 1 Central Library at Institute level ➢ 1 Departmental Library	No. of books for chemical engg (title and numbers) ?
4.2.2	Expenditure for purchase of books/ e-books and subscription to journals/e-journals	767810.00	Specific to Chem. Engg. ?
4.3.1	IT facilities and sufficient bandwidth for internet connection	YES Campus is Wi-Fi Enabled with bandwidth 1 GBPS	Good facilities
4.3.2	Student - Computer ratio	2:1	Sufficient
4.3.3	Audio visual centre, mixing equipment, editing facility, media studio, lecture capturing system(LCS) and related hardware and software for e-content development	Media centre available at Institute Level with following facilities: • Glass Board Studio • Chroma studio • Green Board Studio	Available with all acquired accessories.

		• White Board Studio • Video Switcher and Mixer • Video Conferencing Technology	
4.4.1	Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component	Expenditure incurred on maintenance of physical facilities and academic support facilities is available at institute level.	At institute level. It must be quantify (amount).
4.4.2	Procedures for maintaining and utilizing physical and academic support facilities – laboratory, library, sports complex, computers, classrooms etc	Regular Inspection of Lab is done	Well defined approach.
5	**Student Support and Progression**		
5.1.1	Number of students benefited by scholarships and freeships provided by the institution government and non-government bodies, industries, individuals, philanthropists	Scholarships are still due from the government.	As per M.P. Government.
5.1.2	Efforts taken to provide career counseling including e-counseling and guidance for competitive examinations	Aptitude and GATE classes are conducted regularly.	Related classes and practice sessions are taken regularly
5.1.3	Capacity development and skills enhancement activities are organized for improving students' capability	Soft skills, seminar, paper presentation, internship, software training is done	Needs more participation in such activities
5.1.4	Redressal of student grievances including sexual harassment and ragging cases	No grievances was found including sexual harassment and ragging cases	No grievances.
5.1.5	Student Performance: Passing out in first attempt % Student scoring first class (>6.5 CGPA) No. of UG Students Graduating/ed in 4 years No. of UG Students Graduating/ed in more than 4 years No. of PG Students Graduating in 2 years No. of PG Students Graduated in more than 2 years	 100% 11 11 NIL NIL 01	Needs improvement in overall performance. (esperally 1st div.)
5.1.6	Result Analysis (UG Pass Out Performance) Students with CGPA 10 Students with CGPA 9 to <10	 NIL 00	

	Students with CGPA 8 to <9 Rest all UG Result Analysis (PG Pass Out Performance) Students with CGPA 10 Students with CGPA 9 to <10 Students with CGPA 8 to <9 Rest all PG	7 4 NIL NIL NIL 01	Needs improvement
5.1.7	UG/PG (Co/extra-curricular activities)	Co/extra-curricular activities are conducted by department (Engrosser, B'Reactive and Innovita)	Participation in outside activies are expected
5.1.8	Student industrial internships	11 students have done industrial training in various industries	Interact with more industries.
5.1.9	Student publications	NIL	Attention is needed.
5.1.10	Student Startups	NIL	
5.1.11	Innovative Product/Prototype Developed by Students : Prototype Developed Product Developed Product+Prototype Developed	 NIL	
5.2.1	Number of students placed and package received (Min. and Max.) Number of students progressing to higher education	Students placed = 7 Total Students = 10 70% Students Placed Min:4 lakh Max:.7.5 lakh NIL	Placement is good with good package Incourage for higherstudy
5.2.2	Number of students qualifying in state/ national/ international level examinations (eg: GATE/NET/SLET/Civil Services/State government examinations etc.)	NIL	Needs attention.
5.3.1	Number of awards/medals for outstanding performance in sports/cultural activities at University / state /national / international Level events	NIL	Motivate for the same. Institute has to provide the necessary.
5.3.2	Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the department/institution	Students are members of DUPC, DPPC, Advisory Board, and BoS etc. committees.	Available

5.3.3	Organizes following activities: Sports competitions/events Cultural competitions/events Technical fest/Academic fest Any other events through Active clubs and forums	Technical fest – INNOVITA Paper writing competition – Engrosser Sports & Cultural – Swaranjali (Instt.) Singing – Voice of IES (Instt.)	Organized sufficient activities.
5.4.1	Alumni contribution to the institution through registered Alumni association	Institute has its registered alumni association.	Involve them in more activities.
5.4.2	Alumni contributes and engages significantly to the development of institution through academic and other support system	Alumni plays important role in academic and holistic development of department being a part of BoS, Advisory board, and support in organizing Industrial Visit	Work towards to get support for lab and projects.
5.4.3	Professional Societies/Chapter and organizing events	Student Chapter - IIChE 02 Events Engrosser, INNOVITA, Industrial visit. Number of faculty having professional body membership- 9	Available.
5.4.4	Publication of technical magazines, newsletters etc.	Technical magazines - B'Reactive	Available.
6	**Governance, Leadership and Faculty Empowerment Strategies**		
6.1.1	Governance and leadership are in accordance with the vision and mission and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance	Governance and leadership are in accordance with the vision and mission of the department. Faculties and Students of the department take part in holistic development of institute through various cells and committees.	According to vision and mission and well aligned with NEP.
6.2.1	Committees in place and members: Advisory board, BoS Purchase, Grievance etc.	Yes	Available.
6.3.1	Performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression	Appraisal system and welfare measures are done as per AICTE norms.	Well defined process as per AICTE and institute policy.
6.3.2	Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies	9	Total amount may be specified.
6.3.3	International/National Conferences, symposiums, seminars, research conclaves, workshops, FDPs, STTP, Trainings, Orientation / Induction Programs, Refresher Course etc. attended	30 workshops, FDPs, Refresher Course etc. are attended by 9 faculty members	Good number of activities attended.
6.3.4	International/National Conferences, symposiums, seminars, research conclaves, workshops, FDPs,	Induction Programs, Refresher Course organized	Few more activities may be conducted.

	STTP, Trainings, Orientation / Induction Programs, Refresher Course etc. Conducted		
7	**Values and Best Practices**		
7.1.1	Gender equity & sensitization in curricular and co-curricular activities	• Focus on ethics through subjects like Professional Practice, Law & Ethics. • Representation by female faculties & students in various department level committees like DUPC DPPC, Grievance, Cultural, Sports, Magazine etc. • Participation of female faculties & students in various annual technical, cultural and sports events. as Coordinator, Volunteers and Participants. • Female Students have joined NCC through institute.	Department is committed for the same and have be ~~working~~ for conducting various activities.
7.2.1	Department Best Practices	• Guidance and Assistance Program for Competitive Exams – Free guidance and assistance to students after regular class hours. • Honors and Minor Course • Departmental Whatsapp group – For quick dissemination of useful information & events among students.	Few best practices are observed. Further, they can identify the few more.
8	**Supporting staff contributions**		
8.1.1	Qualification and participation in academics	Lab Staff: Demonstration of experiments, and handle laboratories, Practical for students. Calibration/Maintenance records of lab equipments	Actively participated indept. activities.
8.1.2	Filling and data record keeping	Dispatch Register For Notice and letter, Project Register for list of B. Tech Major Project and M. Tech Thesis, UG/PG) Mark sheet Issue register, Departmental Library Books issue and return register	All records are kept properly.
8.1.3	House keeping	Yes	Good.
8.1.4	Lab maintenance / office maintenance	Yes, The lab maintenance is done regularly	Regularly done.
8.1.5	Staff sent for training/workshops/skill up gradation/qualification	NIL	Needs same.

	improvement		
9	**Other Important Aspects**		
9.1.1	Feedback taken from various stake holders (Passing out students, Alumni, Industry, Parent etc.)	Feedback is collected from all stakeholders	Taken and was discussed for implementation, Dept. level activities may be specified.
9.1.2	Entrepreneurship Cell	IIC cell is available at institute level	
9.1.3	Department Webpage	https://ies.ipsacademy.org/departments/chemical-engg/	Available.
9.1.4	Self-Learning	Students are motivated to undertake NPTEL and MOOC courses.	Data is required,
10	**Reviewer's final comments on dept. strengths and scope for improvement**		Overall, dept. has been working for the betterment of the students and hence institute.

Strength: Overall infrastructure is sufficient. All faculty members are well qualified (mostly PhD completed or persuing) with good academic, teaching and research profile.

Weakness Research activities and collaboration with other departments / institutes / organization Industry support in all aspects (especially funding and supported lab).

Signature of the Reviewer:

Name of the Reviewer: Dr. Kailas L. Wasewar

Designation & Affiliation: Professor & Head,

Department of Chemical Engineering, VNIT Nagpur (M.H)

EXTERNAL ACADEMIC AUDIT
Academic Year 2024-25

Name of the Department: Electrical and Electronics Engineering **Date of Audit: 25/10/2025**
IPS Academy , Institute of Engineering & Science, Indore
A UGC Autonomous Institute affiliated to RGPV

	Criteria	Input from The Department	Reviewers Observations and comments
A	**Department Information**		
A1	Year of Establishment	2003	*Department established & running since 2003.*
A2	NBA Accreditation Status	UG Accredited by NBA New Delhi (2017-2020) . UG Accreditation as autonomous status Tier I SAR has been submitted and NBA visit is expected in last week of November 2025.	*Noted & verified. The Department has been applied for reaccreditation again.*
A3	Dept. vision, mission, graduate attributes/goals clearly defined and its agreement with institute vision, mission and goals	Department Vision & Mission, graduate attributes/goals are well defined in adherence with the same of the Institute. The details are available in the file.	*Yes, in line with Institute Vision Mission and Goals.*
A4	No. of UG intake and admission	B.Tech (Electrical and Electronics Engineering) Sanctioned intake – 30 (Session 2024-25) Admissions – 16 Students through lateral entry - 05	*Noted & verified. 47% seats remained vacant. Strategy should be made to increase the admissions.*
A5	No. of PG programs in the department and admission	One PG Program is offered in the department. M. Tech.(Power Electronics) Sanctioned intake – 9 (Session 2024-25) Admissions – 4	*Very few admissions in PG. May approach employers to encourage their employees to take admission in PG.*
1	**Curricular Aspects**		
1.1.1	Curricular developed and implemented have relevance to local/national regional and global developmental needs	Curriculum developed as per AICTE model curriculum and in line with NEP 2020. The list of courses in the program is attached B.Tech., (EEE) & M.Tech. (Power Electronics)	*Appreciable contribution towards AICTE model curriculum and NEP 2020.*

<table>
<tr>
<td>1.1.2</td>
<td>Syllabus Content % (UG & PG):
Employability/ entrepreneurship/ skill development
PCC (Program Core Courses)
Basic Sciences
Honors and Minors courses
Humanities
Project
Tutorials
Department Elective Course, Open Elective Courses
Field projects / research projects / internships</td>
<td>
<table>
<tr><th>S. No.</th><th>Category</th><th>Syllabus Content Credits (%) UG</th><th>Syllabus Content Credits (%) PG</th></tr>
<tr><td>1</td><td>Employability/ entrepreneurship/ skill development</td><td>22 (8.545%)</td><td>34 (48.57%)</td></tr>
<tr><td>2</td><td>Humanities</td><td>6 (3.62%)</td><td>1 (1.14%)</td></tr>
<tr><td>3</td><td>Basic Sciences</td><td>20 (12.05%)</td><td>3 (4.28%)</td></tr>
<tr><td>4</td><td>ESC(Engineering Science Course)</td><td>21 (12.65%)</td><td>.-</td></tr>
<tr><td>5</td><td>PCC (Program Core Courses)</td><td>76 (45.78%)</td><td>16 (22.85%)</td></tr>
<tr><td>6</td><td>PEC(Professional Elective Courses)</td><td>15 (9.03%)</td><td>9 (12.85%)</td></tr>
<tr><td>7</td><td>OEC(Open Elective Courses)</td><td>12 (7.23%)</td><td>3 (4.28%)</td></tr>
<tr><td>8</td><td>PROJ(Project Work ,Seminar& Internship)</td><td>16 (9.64%)</td><td>26 (37.14%)</td></tr>
<tr><td>9</td><td>Mandatory Courses</td><td>NO Credit</td><td>4 (5.71%)</td></tr>
</table>
</td>
<td>All criteria relevantly maintained in lines with AICTE mode curriculum and NEP 2020 for the holistic growth of student.</td>
</tr>
<tr>
<td>1.1.3</td>
<td>Syllabus in line with AICTE model curriculum</td>
<td>AICTE Model Curriculum and NEP 2020 are followed.</td>
<td>Appreciable contribution towards NEP 2020 & syllabus in line with AICTE model curriculum.</td>
</tr>
<tr>
<td>1.2.1</td>
<td>New courses introduced out of the total number of courses</td>
<td>Nil</td>
<td></td>
</tr>
<tr>
<td>1.3.1</td>
<td>Cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability and other value framework enshrined in Sustainable</td>
<td>
<table>
<tr><th>Cross Cutting Issue</th><th>Number</th><th>Addressed by courses in curriculum/activities</th></tr>
<tr><td>Gender (SDG 5)</td><td>02 Course</td><td>1. Professional Laws , Ethics, Gender, Human values and</td></tr>
</table>
</td>
<td>Noteworthy contribution in UG program same suit can be followed for PG program also.</td>
</tr>
</table>

	Development Goals and National Education Policy – 2020 into the Curriculum			Harmony (MLC-01) 2. Constitution of India (MLC-02)		
		Professional Ethics (SDG 4)	04 Courses	1. Professional Communication Skills (HSMC - EEE301) 2. Communicative English (HSMC-HS-02) 3. Disaster Management (AUD – II) 4. Intellectual Property Rights (OEC-EEE 701(A))		
		Human values (SDG 4)	06 Courses	1. Stress Management 2. (OEC-EEE- 601(B)) 3. Business Communication (OEC- EEE- 501(B)) 4. Liberal learning Course-II (LLC-01) 5. Liberal learning Course-II (LLC-02) 6. Operation Research (OEC-EEE701(C)) 7. Design Thinking (HSMC-HS01)		
		Environment & Sustainability (SDG 7,8,12)	05 Courses	1. Hybrid & Electrical Vehicles (PCC-EEE702) 2. Power Electronics Converters for Renewable Energy(PEC-EEE701(B)) 3. Smart Grid Technology (PEC-EEE701(C)) 4. Solar & Wind Energy (PEC-EEE501(B)) 5. Electrical Energy Conservation and Auditing (PEC-		

		Competition,	slow and fast learners
2.2.2	Student - Full time teacher ratio (STR)	**10:1**	*Verified*
2.3.1	Student centric methods used for enhancing learning experience ICT- enabled tools including online resources for effective teaching and learning process	All classrooms and labs are ICT enabled • Experiential Learning: Internship/ industrial visit/ industrial training • Participative Learning: Technical competition, such as, Techfest e-Awartan & Science exhibition • Problem solving methodology: Softskill training, mentoring, engage in complex, challenging problems & collaboratively work towards there solution by using enter-disciplinary knowledge e.g. ROBOTICS, BAJA etc. (NPTEL, You Tube Video Lectures, MOOCs etc.)	*Verified*
2.3.2	Mentor-Mentee Schemes to address academics and student-psychological issues	Mentor-Mentee scheme is followed and practiced regularly. Maximum 10 mentees are assigned to one mentee every year.	*Wellness counselor is available at institute level.* *Mentor-Mentee process is well in order. There are minimum two meetings are held per semester*
2.3.3	Preparation and adherence of Academic Calendar and Teaching plans	**Yes** Department Activity Calendar and Teaching Plans are prepared in adherence with the Institute Academic Calendar	*Yes follows*
2.4.1	Number of full time teachers appointed against the sanctioned posts	Faculty list attached	*As per norms*
2.4.2	Full time teachers with Ph.D.	05 (Session 2024-25) for session	*Faculty be encouraged for quality research*
2.4.3	Total teaching experience of full-time teachers (in number of years)	16 (14+02) full time faculties. Average experience = 12 years	*Verified & Appreciable.*
2.4.4	Number of full time teachers who have been working in the organization	*Average experience is between 10 and 15.*	*Very good faculty retention.*

	continuously during the entire assessment period		
2.4.5	Number of PhDs pursuing faculty	**08**	*Very promising number. Faculties should be encouraged to complete PhD in stipulated time.*
2.4.6	Faculty Cadre	Professor-04 Associate Professor-02 Assistant Professor-10	*Cadre ratio as per norms.*
2.4.7	Faculty Retention with respect to CAYm2	100%	*Exceptionally well.*
2.4.8	Full time adjunct faculty in the department	NIL	*Noted.*
2.4.9	Part time adjunct faculty in the department	02 (1.Prof. Jagdish Chhabria 2. Prof. Sundeep Gupta)	*Noted.*
2.4.10	Faculty/Industry People Invited in co-teaching	02 Expert Lecture	*It is suggested to Involve experts in direct co-teaching of the courses in curriculum.*
2.4.11	JRF/SRF/TA/RA in the department	Teaching Assistants(TA) – 04	*Noted.*
2.5.1	Number of days from the date of last semester-end/ year- end examination till the last date of declaration of results	(Winter Examination)Dec.-Jan 2025:26 day (Summer Examination)May-June 2025: 19 day	*Commendable work.*
2.5.2	Number of Student complaints/grievances about evaluation	NIL (Grievance Redressal Mechanism is available)	*Very Good*
2.5.3	IT integration and reforms in the examination procedures and processes Improvement in Examination Management System (EMS) of the institution	Full OBE evaluation via Campus Management system (CMS) Examination reforms are in place as per guidelines issued by AICTE in connection with examination reforms.	*Praiseworthy work done.*
2.5.4	Exam Evaluation Scheme: Theory	Theory evaluation Scheme comprises of HA (15) + MST (25) + ESE (60) = 100 Practical evaluation Scheme comprises of Internal (40) + ESE (60) = 100	*As per Academic Rules Regulation(ARR) available on website.*

	Practical Audit of question papers through experts External examiners participation in practical evaluation Open Book Exams Comprehensive viva voice exam	Moderation of Question Paper is done. External Examiners are called for Practical Evaluation. Comprehensive viva voice exam -No	
2.6.1	CO-PO Assessment	Direct /Indirect Assessment [Attachment enclosed in file]	*Perused and found appreciable*
2.6.2	Pass percentage of students (excluding backlog students)	B.Tech – 100% (16/16) M.Tech.-100% (3/3)	*Excellent in UG & PG*
2.6.3	DUPC-DPPC: UG, PG	DUPC for UG program and DPPC for PG programs are constituted and functional at departmental level.	*Appreciable that the feedback from all stack holders are accounted and DUPC and DPPC are operational for guidance during registration.*
2.6.4	Quality of Students projects and relevance to specialization UG & PG	B.Tech – 06 projects (of 06 groups) Quality of UG & PG students is assessed regularly (once every month) in terms of aim of work, content, presentation skills, defense viva, resource management etc.	*Projects should be more oriented towards live problems of industry. All students should be encouraged to publish research papers in SCI/UGC-CARE/ SCOPUS journals of repute. To ensure the quality of project , every year project competition is organized under techfest e-Awartan .*
2.7.1	Online student satisfaction survey regarding the teaching learning process.	Collected at Institute Level.	*Noted.* *Appreciable work.*
3	**Research, Innovations and Extension**		
3.1.1	Research facilities are frequently updated	• Incentive on research publication/ patent/ book publication/ conference	*Good policy framework.*

	Policy for promotion of research which is uploaded on the institutional website and implemented	registration fee & allowances. • Financial support for workshop & seminar participation https://ies.ipsacademy.org/wp-content/uploads/2016/12/Research-Policy-Revised.pdf	
3.1.2	Amount of seed money provided by institution to its teachers for research	*As per institute policy*	*Faculty should be motivated to apply for seed funding for research.*
3.1.3	Number of teachers receiving national/ international fellowship/ financial support by various agencies for advanced studies/ research	NIL	*More participation of faculties is needed in national/international events, conferences, symposiums, competitions etc.*
3.2.1	Research funding received by the institution and its faculties through Government and non-government sources	**NIL**	*Needs improvement*
3.2.2	Number of research projects per teacher	**NIL**	*Needs improvement.* *Faculties should send more research proposals to government agencies for grants.*
3.2.3	Number of teachers recognized as research guides	**NIL**	*Needs improvement.*
3.2.4	Faculty applied for research funding	02 faculties have applied for research funding from government agencies. (Dr. Manish Sahajwani & Mr. Kamlesh Gupta)	*Verified and faculty shall be encouraged to take up more research assignments.*
3.3.1	Awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer	Department has 1 patent published in 2024-25 **(IoT enabled solar equipment for solar energy collection and distribution)**	*Needs improvement.*

	of knowledge/technology and the outcomes of the same (IPR like Patent etc.)		
3.4.1	Code of Ethics for research and the implementation	https://ies.ipsacademy.org/wp-content/uploads/2016/12/Research-Policy-Revised.pdf	*All Committees Operational.*
3.4.2	Number of candidates registered for Ph. D per teacher	NIL	*Needs improvement*
3.4.3	Number of research papers published in the Journals as notified on UGC CARE list	06 Research papers *6/14 = 0.43, <1*	*Needs improvement.*
3.4.4	Number of books and chapters in edited volumes published	Nil	*Needs improvement.*
3.4.5	Average Citation index in Scopus/ Web of Science	2.5	*Needs improvement*
3.4.6	Scopus/ Web of Science – h-index	4.1	*Needs improvement*
3.4.7	Faculty publication in reputed conferences	4	*Noted*
3.4.8	Faculty publication ratio (UGC CARE list Journals)	5/14=0.43	*5/15 = 0.33, <1.* *Needs improvement.*
3.5.1	Revenue generated from consultancy and corporate training	NIL	*No consultancy from outside.* *Dept. may start with small testing projects of industry*
3.6.1	Extension activities in sensitizing students to social issues and holistic development	Various extension activities like rural outreach, traffic awareness, voter awareness, blood donation camp, health checkups, NSS, NCC etc. are organized as institute and department level for sensitizing students to social issues and holistic development. Various extension activities like rural outreach, traffic awareness, voter awareness, blood donation camp, health checkups, NSS,	*Commendable work.*

		NCC etc. are organized as institute and department level for sensitizing students to social issues and holistic development • Unnat Bharat Abhiyan Adopted 5 villages: Kudana, Kattkya, Magarkheda, Solsinda, Potlod • Rural Outreach • Swachh Bharat Abhiyan • NCC Acitvities 1. Ghar Ghar Tiranga Har Ghar Tirnga 2. NCC Combined Annual Trg Camp (Catc-Iii) 3. Swachh Bharat Abhiyan Puneet Sagar Scheme 4. 75th NCC Day Celebration 5. Eye Check Up Camp 6. Rural Outreach Program 7. World Environmental Day	
3.6.2	Number of extension and outreach programs conducted through organized forums including NSS/NCC with involvement of community	**16** programs/activities conducted.	*Good initiative.*
3.7.1	Faculty industry connect: Number of functional MoUs Number of industries visited by faculty	Number of functional MoUs - 02 Number of industries visited by faculty -04	*Needs improvement.* *Involve industry personnel in direct co-teaching.*
3.7.2	Industry participation in funded projects : Co-teaching details for each course:	Nil	*Needs improvement*
3.7.3	Faculty travelled abroad/in country for collaboration	Asst. Professor Kamlesh Gupta, Prof. Manoj Gupta	*Faculties must be encouraged for international collaboration and research.*
4	**Infrastructure and Learning Resources**		

4.1.1	No. of classrooms Laboratories Computing equipment ICT – enabled facilities such as smart class, LMS etc. Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc.	No. of classrooms:05 Laboratories:09 Computing equipment:44 All classes are smart classes & equipped with LCD Projector and CMS is used for LMS 1) 3 Audi (Available at Institute level for Cultural Activities) 2) 2 Quadrangle & Central ground for outdoor games 3) Student Section for indoor games and yoga activity	*Adequate infrastructure for the conduction of UG/PG program.*
4.1.2	Expenditure excluding salary, for infrastructure development and augmentation	Expenditure for infrastructure development and augmentation is available at institute level.	*Noted.*
4.1.3	Equipments and facilities available and their status: Log book status Software Modeling and computational tools and facilities Incubation Labs	Projectors, Printers, WiFi, Departmental Library, Photocopy Machines, Personnel Faculty Cabin with PC's with LAN connection, Generator Smart TV, Wheel Chair available in department and are in working condition. Available at respective labs. 03 Yes. Simulation Lab is well equipped with computational facilities and software's. Nil	*Noted and verified .* *All the students of UG and PG take the benefits of software and* Simulation Lab .
4.1.4	Industry sponsored labs	Nil	*Needs improvement. Involvement from Alumni who are in industry may be sought.*
4.1.5	New lab/equipments added	No new software purchased.	*Procure more Software relevant to the programs.*

	New software added MODROBS Sanctioned Testing Lab		
4.1.6	Virtual Lab Development	EoI signed with Virtual Lab MoE. Virtual Lab experiments are available at all computer nodes.	*Good work.*
4.2.1	Library facilities The library is optimally used by the faculty and students	Yes 1) Central Library at Institute level 2) Departmental Library	*Commendable work. E-journals Packages are also available.* *Department Library can also be developed as student self-learning centre.*
4.2.2	Expenditure for purchase of books/ e-books and subscription to journals/e-journals	3% of total expenditure at department level. Expenditure for, Purchase of books - Rs.36,300/- Journals/e-journals- Rs. 19,35,662.00/-	*Good.*
4.3.1	IT facilities and sufficient bandwidth for internet connection	Yes. Campus is Wi-Fi Enabled with bandwidth 1 GBPS.	*Noted & verified.*
4.3.2	Student - Computer ratio	2:1 (UG) 1:1 (PG)	*Good.*
4.3.3	Audio visual centre, mixing equipment, editing facility, media studio, lecture capturing system(LCS) and related hardware and software for e-content development	Yes Media centre available at Institute Level	*Appreciable initiative*
4.4.1	Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component	Adequate expenditure incurred on maintenance of physical facilities and academic support facilities	*Appreciable*
4.4.2	Procedures for maintaining and utilizing physical and academic support facilities – laboratory, library,	Regular Inspection and Calibration of Instruments (Audit reports available at respective laboratories)	*External Experts conducts the audit and reports are available in the department.*

	sports complex, computers, classrooms etc		
5	**Student Support and Progression**		
5.1.1	Number of students benefited by scholarships and freeships provided by the institution government and non-government bodies, industries, individuals, philanthropists	Scholarships as per M.P. Government are available. https:scholarships.gov.in(For OBC Students) tribal.mp.gov.in (For SC/ST Students)	*Noted*
5.1.2	Efforts taken to provide career counseling including e-counseling and guidance for competitive examinations	Session conducted on career counseling by external/internal experts	Guidance for GATE and other Professional Exams is available to students for free which is a praiseworthy step.
5.1.3	Capacity development and skills enhancement activities are organized for improving students' capability	Soft skills, Annual seminar, paper presentation, internship, software training	Very good
5.1.4	Redressal of student grievances including sexual harassment and ragging cases	Redressal of student grievances including sexual harassment and ragging cases no any grievances reported for session 2024-25	Noted
5.1.5	Student Performance: Passing out in first attempt % Student scoring first class (>6.5 CGPA) No. of UG Students Graduating/ed in 4 years No. of UG Students Graduating/ed in more than 4 years	**100% (16/16)** **14** **16** **-**	*Very Good in UG & PG*

	No. of PG Students Graduating/ed in 2 years No. of PG Students Graduating/ed in more than 2 years	**01** **02**	
5.1.6	Result Analysis (UG & PG Pass Out Performance) Students with CGPA 10 Students with CGPA 9 to <10 Students with CGPA 8 to <9 Rest all UG,PG	 **0** **1** **5** **10,0**	*Very good*
5.1.7	UG/PG (Co/extra-curricular activities)	UG: e-Awartan	*Noted*
5.1.8	Student industrial internships	**12** students have completed the internship	*Internship should be in-line with the project of students. This will also enhance the employability of student.* *Interned students should give presentation to second year and third year students.* *(List attached)*
5.1.9	Student publications	NIL	*Noted*
5.1.10	Student Startups	NIL	*Noted*
5.1.11	Innovative Product/Prototype Developed by Students : Prototype Developed Product Developed Product+Prototype Developed	Technical Fest e-Awartan is organized at department level every year. Where students Participate in Paper Presentation Competition,Technical Quiz ,Circuit Making Competition,Poster Competition.Prize will be given to winner and runner-up. 02 (e-Baha, Fire Frightening Drone)	*Students should be encouraged to participate at national/international level tech-fests/competitions at IITs, NITs etc.*

5.2.1	Number of students placed and package received (Min. and Max.) Number of students progressing to higher education	**05 (UG)** Placement % = (5/16)*100 = 31% **Max Package-5.5 Lacs** **Min Package-3.0 Lacs** Higher education % = (3/15)*100 =20%	*Needs improvement.* *Alumni who are entrepreneurs or are associated with industry may be approached for recruitment drives for more placements.*
5.2.2	Number of students qualifying in state/ national/ international level examinations (eg: GATE/NET/SLET/Civil Services/State government examinations etc.)	**Nil**	*Needs improvement. This will also increase higher education enrolment.*
5.3.1	Number of awards/ medals for outstanding performance in sports/ cultural activities at University / state /national / international Level events	**Nil**	*Needs improvement.*
5.3.2	Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the department/institution	Students are members of DUPC, DPPC, Advisory and BoS etc. committees.	*Praiseworthy work.*
5.3.3	Organizes following activities: Sports competitions/ events Cultural competitions/ events Technical fest/ Academic fest Any other events through Active clubs and forums	Technical fest – e-Awartan Quiz Competition – e-Awartan Paper Presentation e-Awartan Sports & Cultural – Swaranjali (Instt.) Singing – Voice of IES (Instt.)	*Appreciable.*
5.4.1	Alumni contribution to the institution through registered Alumni association	Registered Alumni Association Exist at institute level	*Noted*

5.4.2	Alumni contributes and engages significantly to the development of institution through academic and other support system	Alumni plays important role in academic and holistic development of department being a part of BoS, Advisory board, Placements etc. *Alumni feedback is also obtained for curriculum development, facilities enhancement, employment generation etc.*	*Other alumni contribution noted.* *Entrepreneur alumni should be approached often to provide training/ internship and offer employment opportunities to current batches.*
5.4.3	Professional Societies/Chapter and organizing events	01 (e-Awartan under ISTE)	*Less participation by students in professional society events outside institute. This needs to be improved.*
5.4.4	Publication of technical magazines, newsletters etc.	E-Magazine **Urja** is annually published by the department with inputs from faculties and students.	*Noted & verified*
6	**Governance, Leadership and Faculty Empowerment Strategies**		
6.1.1	Governance and leadership are in accordance with the vision and mission and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance	Faculties and Students take part in holistic development of department and institution being member of various committees. [List has been attached]	*Noted*
6.2.1	Committees in place and members: Advisory board, BoS Purchase, Grievance etc.	YES. List has been attached	*Noted*
6.3.1	Performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression	Appraisal system and welfare measures are done as per AICTE norms. • **IPS Sakh Sahakari Santha Matyadit:** • **Uniform for Faculties:** • **Medical facility within the Institution** • A Qualified Medical Practitioner is available	*Available for teaching and non-teaching staff.*

		• ambulances within the Institution • MoUs with nearby hospitals	
6.3.2	Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies	08 faculties received financial assistance for Life Membership in various reputed professional bodies.	*Noted*
6.3.3	International/National Conferences, symposiums, seminars, research conclaves, workshops, FDPs, STTP, Trainings, Orientation / Induction Programs, Refresher Course etc. attended	No. of faculty attended the program - 14	*Very good.* *(14/14)*100 = 100%*
6.3.4	International/National Conferences, symposiums, seminars, research conclaves, workshops, FDPs, STTP, Trainings, Orientation / Induction Programs, Refresher Course etc. Conducted	• Expert lecture -02 • No. of program including International/National Conferences, symposiums, seminars, research conclaves, workshops, FDPs, STTP, Trainings, Orientation / Induction Programs, Refresher Course etc. conducted - 02	*Noted*
7	**Values and Best Practices**		
7.1.1	Gender equity & sensitization in curricular and co-curricular activities	• Focus on ethics through subjects like Professional Practice, Law & Ethics. • Representation by female faculties & students in various department level committees like DUPC, DPPC, Grievance, Cultural, Sports, Magazine etc. • Participation of female faculties & students in various annual technical, cultural and sports events like e-Awartan, Swaranjali etc., as Coordinator, Volunteers and Participants. • Female Students have joined NCC through institute.	*Appreciable*
7.2.1	Department Best	• Guidance and Assistance Program for	*Use of social media is*

	Practices	Competitive Exams – Free guidance and assistance to students after regular class hours. • Honors and Minor Course • Social media used for quick dissemination of useful information & events among students.	*praiseworthy*
8	**Supporting staff contributions**		
8.1.1	Qualification and participation in academics	B.E./B.Tech/ Diploma/I.T.I Lab Staff: Demostration of experiments, and handle laboratories, Practicals for students Maintenance records of lab equipments	*Noted*
8.1.2	Filling and data record keeping	Dispatch Register for Notice and letter Project Resister for list of B.Tech Major Project and M.Tech Thesis (UG/PG) Mark sheet Issue register Departmental Library Books issue and return register Training & internship Register	*Noted*
8.1.3	House keeping	Store Register	*Noted*
8.1.4	Lab maintenance /office maintenance	Store Register Calibration and Maintenance record Register, Stock Register	*Noted*
8.1.5	Staff sent for training/workshops/skill up gradation/qualification improvement	Technical Skill Development Programme: 02	*Noted*
9	**Other Important Aspects**		
9.1.1	Feedback taken from various stake holders (Passing out students, Alumni, Industry, Parent etc.)	Feedback is collected from all stakeholders. *Students, Teachers, Employers, Alumni - Feedback collected, analyzed and action has been taken.*	*Take more feedbacks from Academic Peers when they appear as External Examiners in your institute. Prepare a feedback form for the same.*
9.1.2	Entrepreneurship Cell	Available	*Noted & verified.*
9.1.3	Department Webpage	https://ies.ipsacademy.org/departments/elect-	*Available*

		elex-engg/	
9.1.4	Self-Learning	Course included in curriculum. Also inculcated through events and activities like e-Awartan	*Noted.* *Course is available.*
10	**Reviewer's final comments on dept. strengths and scope for improvement**		*Please refer below:*

Strengths:

1. Good faculty strength and faculty retention rate.
2. Curriculum is appropriately designed & updated according to NEP 2020 and in-line with AICTE model curriculum.
3. Exercise of syllabus evaluation and updating is in routine.
4. Good participation of students in academic as well as administrative processes.
5. Adequate gender representation at all levels.
6. Innovative steps by department like Guidance Program for students, regularly updated social Media handle .

Weakness:

1. Need for improvement in testing and consultancy works, A certified lab is required to be establish.
2. 06 SCI/Scopus/conference research publications, book chapters and student chapter.
3. Placement should be improved.
4. An intense drive should be made to obtain more research and consultancy projects from industry and government.
5. Outcome should be Measurable and comparable along with set target.
6. Internship should be monitored by mentor regularly.
7. Focus on training & education on New Technologies.

Signature of the Reviewer:
Name of the Reviewer: Mr. Rakesh Joshi
DGM, Cummins Tech. India Pvt. Ltd.

Signature of the Reviewer:
Name of the Reviewer: Dr. K.K. Sharma
Head & Prof. EC, MNIT Jaipur & Coordinator IIT Kota.