

# Innovations by the Faculty in Teaching and Learning

## Innovations Facility

Sr. No.	Name of Innovations Facility	Details	Number of faculty member involved	Utilization	Impact
1.	Faculty Development Program on Teaching Learning process using ICT Tools	<p>Department of IT had organized 03 online Faculty Development Program on <b>“Teaching Learning Processes Using ICT Tools for Education 4.0”</b> during May-June 2020. A number of 6172 participants from 29 different states participated in the event.</p> <p>The FDP has focused upon numerous online teaching learning processes and ICT Tools like Big-Blue Button, Google Classroom, Data Studio, Google form, Virtual Lab, Online Compiler, Virtual classroom, Wordpress etc. Video editing tools like – Bandicam, Openshot, Bandicut etc.</p>	All departmental faculty members	In a pandemic situation, all innovative pedagogical tools were useful for interactive teaching.	This FDP has motivated teachers to enhance student engagement through interactive and collaborative learning, thus maximizing learning outcomes. Innovative pedagogical tools to utilize effective teaching practices and develop an ability to enhance student engagement through interactive and collaborative learning.

2.	Moodle based learning.	The faculty got Moodle Gnomio training from IIT Bombay and the Institute-level Faculty Development Program. Faculty have utilized this knowledge to generate their own Gnomio sites for a various courses.	All departmental faculty members	Faculty members are using the Moodle platform to share E-resources and online evaluation of the students.	<p>1.To Build a platform for students and teachers to enable blended learning.</p> <p>2. To improve the teaching learning process.</p> <p>3. Analyze real-time progress and Evaluation of each student and recommend corrective actions for better learning.</p>
3.	IIT Bombay Spoken Tutorial based Learning	<p>During their internal valuation, the department has made IIT Bombay Spoken Tutorial mandatory for all semesters.</p> <p>Faculty members provide training on spoken tutorials to registered students and encourage them to participate in the certificate exam.</p>	5-6 Faculty members	<p>1. To provide a learning platform for students.</p> <p>2.To enhance programming skills.</p> <p>3. To improve university exam results.</p>	<p>The students programming knowledge is enhanced by the use of a spoken tutorial.</p> <p>This spoken tutorial helps students in improving their programming skills on an open source platform and get certificate in association with IIT Bombay.</p>

4.	MOOCs Based Learning	<p>Department had a practice of motivating students to participate in various MOOC's courses from CourseEra, Edx, Udemy, Udacity and NPTEL related to their semester based courses and emerging technologies.</p> <p>Faculty members are also involved for MOOC courses for upgrading skills.</p>	Few Faculty members as mentors	<p>1.To conduct courses on emerging trends and technologies.</p> <p>2. To improve placements.</p>	MOOCs have a significant direct impact for skill development as it improves education outcomes and also improves placement in IT sector.
5.	Student Information System - A Counselling and Mentoring Software	<p>Student Information system is the online counselling and Mentoring System. It is a Data driven system for better student's centric analysis. This software is developed and maintained by team of bright students mentioned by faculty members.</p> <p>All demographic, academic, co-curricular, and extracurricular information are filled by students regularly.</p> <p>Students scores are checked using university results, past backlogs, and a questionnaire. The system supports to identify slow , average and fast learners.</p>	02 Faculty mentors and all departmental faculty members for Counselling	<p>1.To provide technical and personal counselling to students.</p> <p>2.To improve bond between faculty and students.</p> <p>3.To decide slow, average and fast learners.</p> <p>4. To provide inputs for improvements in learning.</p>	The counselling and mentoring system has helped to identify slow, average and bright learners and help for their improvement.

6.	Virtual Book Store -Mobile Application	<p>VBS is mobile application useful for all Nagpur University students. The VBS app provides a platform for better learning, as well as question papers and notes.</p> <p>VBS also provide videos lecture, job opening information free notes and university latest questions paper along with its solution.</p>	01 Faculty Member	<p>1.VBS App has been used by all students during the semester for exam preparation.</p> <p>2. To provide training on mobile App, developments to participating students.</p>	<p>1. More than 60,000 students of RTM Nagpur university benefitted from VBS.</p> <p>2. 07 students got trained in mobile App development.</p>
7.	Employability Skill Enhancement through specially designed placement support module	<p>This is Google Classroom based module developed and maintained by faculty members of the department to increase the department placement ratio. Training to final year and prefinal year students is provided.</p>	04 Faculty members	<p>1. To provide Aptitude and Technical training to 3rd and 4th year departmental students.</p> <p>2 To provide support for Personal interview.</p> <p>3 To provide special inputs by Alumni members.</p> <p>4. To increase the department placement ratio.</p>	<p>1. Increased bond between faculty, alumni and students.</p> <p>2. Improved placement of students.</p>

## Instruction Delivery

Sr. No.	Name of Innovation Facility	Details	Number of faculty member involved	Utilization	Impact
1.	Training on Cloud Computing and Blockchain	Conduction of online session on Cloud Computing and Blockchain at UGC HRDC, Nagpur, for faculty members across the nation.	01	Resource Expert for National level Institute	<p>1.Knowledge Enhancement.</p> <p>2. The quality of teaching deliverables has improved.</p> <p>3. Use of Emerging Technologies.</p> <p>4. Connect with outside world.</p>
2.	Expert Talk on various technical subject	Expert sessions on C/C++/Java Programming/ Servlet/ Adv. Java, Python, Online Exam Ethics, etc delivered successfully in various Engineering & Non – Engineering institutes.	01	Resource expert at university affiliated and autonomous institute.	
3.	Wadhwani Foundation Course on Entrepreneurship	Conduction of training of Wadhwani foundation course at institute level for interested students of all branches.	01	Resource Expert for Institute level	
4.	Workshop on Internet of Things	Workshop for Polytechnic students on Internet of Things at Government Polytechnic, Chindwada (MP)	01	Resource Expert for Polytechnic Institute.	

5.	Seminar on Python	Seminar for Polytechnic students on Python at Government Polytechnic, Khamgaon.(MS)	01	Resource Expert for Polytechnic Institute.	
6.	Training on Java Programming for CDAC course.	Corporate training to students of CDAC course at Soft Polynomials, Nagpur.	01	Resource Expert at Training Institute for professional course	

### Details of Industrial Visits and Internship

Sr. No.	Name of Innovation Facility	Details	Number of faculty members involved	Utilization	Impact
1.	Faculty initiated Industrial visit	<p>Faculty members have decided to visit reputed IT industries and institute of repute to increase contact for internship and projects.</p> <p>Few faculty members while visiting Hyderabad, initiated talk with Anusaraka Lab, IIIT Hyderabad, which is an reputed research institute focused on Natural Language Processing and Machine Learning.</p>	All departmental faculty members	<p>On April 23, 2019, our department signed a Memorandum of Understanding (MOUs) for the Applied Grammar Project for Communicator and Language Accessor for English to Marathi and vice versa.</p> <p>The goal of the MOU is-</p> <p>1.To foster collaboration, provide opportunity for global experience.</p>	<p>1.Students are learning about the latest AI/NLP and ML trends.</p> <p>2.Students when visiting IIIT-Hyderabad get the opportunity to undergo internship and complete major projects under guidance of IIIT-Hyderabad expertise for a period of 1.5 years.</p> <p>3. Many students got good placement due to their projects developed at IIIT,</p>

		They were impressed by initiative and it has converted into long term relationship including MOU on Applied Grammar with internships and projects for 3rd and 4th year students.		2.To facilitate advancement of knowledge on the basis of reciprocity, best effort, mutual benefit, and frequent interactions.	Hyderabad.
		Industrial visit to Huawei Telecommunications, Delhi on 31st August 2018.	2-Faculty members	<p>1 Students got exposure to world class data centre of Huawei in Delhi.</p> <p>2. Faculty and Student members knowledge is improved for Cloud Computing and Mobile Communication courses of final year.</p>	<p>1.All the 54 students have registered and appeared for global certificate competition test based on the syllabus given by cognitel, a group of Huawei in the month of September 2018.</p> <p>2.Five students have been shortlisted and same were called for the job fair which was on 23<sup>rd</sup> December 2018.</p> <p>3. In the job fair, two students got selected in Insight Business Machines Pvt. Ltd.</p>
2.	<b>Internship</b>	Industry Internship to reputed IT	All Faculty members		1.90% of students of each batch that undergo Mini

		<p>Companies-</p> <p>All Industries and Institute of Repute were visited and identified by faculty members of the department for better quality internships.</p>		<p>1. Quality improvement for internships.</p> <p>2. To increase Industry connect for department.</p> <p>3. Industry involvement in the program design and partial delivery of any regular courses for students.</p>	<p>Project and Internship in an industry get the opportunity to undertake Major project in the same company.</p> <p>2. Students are getting placement opportunities in the company where they completed their project.</p> <p>3. Industry professionals helped department for GAP identification and improvements in Teaching-Learning System.</p>
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## Interactive Class Room

### 1. Two Smart classrooms and One ICT based Classroom-

#### Utilization:

1. To enable teachers to access multimedia content and information that can be used for teaching students more effectively.
2. To teach students in Blended mode for post pandemic period in a innovative way which helps for better understanding for the students.



# ICT Tools

## Virtual Lab

Academic Year	Faculty Using ICT tools	Subject	Semester	Details	Link	PO	PSO
2020-21	Prof. Shabana Pathan	Computer Graphics	5th sem IT	Practicals on Transformations by virtual labs, IIT Hyderabad	<a href="http://cse18-iiith.vlabs.ac.in/List%20of%20experiments.html?domain=Computer%20Science">http://cse18-iiith.vlabs.ac.in/List%20of%20experiments.html?domain=Computer%20Science</a>	PO1,PO2,PO5,PO7,PO12	PSO1
	Prof. Priti Golar	Digital Image Processing	8th sem IT	Numericals on Virtual Lab	<a href="http://cse19-iiith.vlabs.ac.in/List%20of%20experiments.html?domain=Computer%20Science">http://cse19-iiith.vlabs.ac.in/List%20of%20experiments.html?domain=Computer%20Science</a>	PO1,PO3,PO5,PO7,PO12	PSO1
	Prof. Pooja Walke	Artificial Intelligence	7th sem IT	Virtual lab for NLP	<a href="http://nlp-iiith.vlabs.ac.in/">http://nlp-iiith.vlabs.ac.in/</a>	PO5,PO7,PO12	PSO1
	Prof. Pooja Walke	Digital Electronics and Fundamental of Microprocessor	3rd sem IT	Virtual lab for DEFM Practical	<a href="https://de-iitr.vlabs.ac.in">https://de-iitr.vlabs.ac.in</a>	PO5,PO7,PO12	PSO1



## Software / Mobile App

Academic Year	Faculty Using ICT tools	Subject	Semester	Details	Link	PO	PSO
2019-20	Prof. Hemlata Sahu	Design & Analysis of Algorithm , Programming Logic & Design Using C	5th sem IT	1. Data Algorithm Visualization 2. Greeks For Greeks	<a href="https://www.cs.usfca.edu/~galles/visualization/Floyd.html">https://www.cs.usfca.edu/~galles/visualization/Floyd.html</a> <a href="https://www.geeksforgeeks.org/8-puzzle-problem-using-branch-and-bound/">https://www.geeksforgeeks.org/8-puzzle-problem-using-branch-and-bound/</a>	PO1,PO3 ,PO5, PO7,PO12	PSO 1
		Internet Programming	6th sem IT	HTML code play, android studio	html code play, android studio	PO1,PO3 ,PO5, PO7,PO12	PSO 1, PSO 2

		Design & Analysis of Algorithm , Programming Logic & Design Using C	5th sem IT	Beyond Syllabus / For curriculum delivery	<a href="https://www.cs.usfca.edu/~galles/visualization/Floyd.html">https://www.cs.usfca.edu/~galles/visualization/Floyd.html</a> <a href="https://www.geeksforgeeks.org/8-puzzle-problem-using-branch-and-bound/">https://www.geeksforgeeks.org/8-puzzle-problem-using-branch-and-bound/</a>	PO1,PO3 ,PO5, PO7,PO12	PSO 1
2018-19	Prof. Manali Patki	System Programming	5th sem IT	For curriculum delivery	<a href="https://play.google.com/store/apps/details?id=in.witsolapur.sysproapp">play.google.com/store/apps/details?id=in.witsolapur.sysproapp</a>	PO1,PO2 ,PO3,PO5,PO7,PO12	

## Course Website (Moodle)

Academic Year	Faculty Using ICT tools	Subject	Semester	Details	Link	PO	PSO
2020-21	Dr. Manoj Bramhe	Database Management System	5th sem IT	Gnomio site, Moodle	<a href="https://mbramhe.gnomio.com/">https://mbramhe.gnomio.com/</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO 1
		Computer System Security	7th sem IT		<a href="https://mbramhe.gnomio.com/">https://mbramhe.gnomio.com/</a>	PO1,PO2,PO3,PO5,PO7,PO12	
	Prof. Shabana Pathan	Ecomm ERP	8th sem IT	Gnomio site, Moodle	<a href="https://spathan.gnomio.com">https://spathan.gnomio.com</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO 1
		Computer Graphics	5th sem IT		<a href="https://spathan.gnomio.com">https://spathan.gnomio.com</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO 1
	Prof. Priti Golar	System Programming	5th sem IT	Gnomio site, Moodle	<a href="https://golar.gnomio.com">https://golar.gnomio.com</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO 1
		Data Warehousing and Mining	7th sem IT	Gnomio site, Moodle	<a href="https://pgolar.gnomio.com">https://pgolar.gnomio.com</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO 1

		Theory of Computat ion	4th sem IT	Gnomio site, Moodle	<a href="https://pgolar.gnomio.com">https://pgolar.gnomio.com</a>	PO1,PO2 ,PO3,PO 5,PO7,P O12	PSO 1
		Digital Image Processin g	8th sem IT	Gnomio site, Moodle	<a href="https://pgolar.gnomio.com">https://pgolar.gnomio.com</a>	PO1,PO2 ,PO3,PO 5,PO7,P O12	PSO 1
	Prof. Hemlata Sahu	Program ming Logic & Design Using C	3rd sem IT	Gnomio site, Moodle	<a href="https://hemlata.sahu.gnomio.com">https://hemlata.sahu.gnomio.com</a>	PO1,PO2 ,PO3,PO 5,PO7,P O12	PSO 1
		Design & Analysis of Algorithm	5th sem IT	Gnomio site, Moodle	<a href="https://hemlata.sahu.gnomio.com">https://hemlata.sahu.gnomio.com</a>	PO1,PO2 ,PO3,PO 5,PO7,P O12	PSO 1
		Internet Program ming	6th sem IT	Gnomio site, Moodle	<a href="https://hemlata.sahu.gnomio.com">https://hemlata.sahu.gnomio.com</a>	PO1,PO2 ,PO3,PO 5,PO7,P O12	PSO 1
	Prof. Manali Patki	Gaming Architect ure and Program ming	8th sem IT	Gnomio site, Moodle	<a href="https://manalipatki.gnomio.com/">https://manalipatki.gnomio.com/</a>	PO1,PO2 ,PO3,PO 5,PO7,P O12	PSO 1
	Prof. Pooja Walke	Artificial Intelligenc e	7th sem IT	Gnomio site, Moodle	<a href="https://poojaw.gnomio.com/">https://poojaw.gnomio.com/</a>	PO1,PO2 ,PO3,PO 5,PO7,P O12	
		Distribute d Systems	8th sem IT	Gnomio site, Moodle	<a href="https://poojaw.gnomio.com/">https://poojaw.gnomio.com/</a>	PO1,PO2 ,PO3,PO 5,PO7,P O12	

	Prof. Neha Singh	Software Engineering	5th sem IT	Gnomio site, Moodle	<a href="https://nsingh.gnomio.com">https://nsingh.gnomio.com</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO 1
		Object Oriented Methodology	5th sem IT	Gnomio site, Moodle	<a href="https://nsingh.gnomio.com">https://nsingh.gnomio.com</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO 1
	Prof. Vishal Tiwari	Ethics in Information Technology	3rd sem IT	Gnomio site, Moodle	<a href="https://vtiwarisvpcet.gnomio.com/">https://vtiwarisvpcet.gnomio.com/</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO 1
		Operating Systems	6th sem IT	Gnomio site, Moodle	<a href="https://vtiwarisvpcet.gnomio.com/">https://vtiwarisvpcet.gnomio.com/</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO 1
		Database Management System	6th sem IT	Gnomio site, Moodle	<a href="https://vtiwarisvpcet.gnomio.com/">https://vtiwarisvpcet.gnomio.com/</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO 2
	Prof. Praveen Sen	Algorithms and Data Structures	4th Sem IT	Gnomio site, Moodle	<a href="https://psen.gnomio.com">https://psen.gnomio.com</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO 1
		Java Programming	5th sem IT	Gnomio site, Moodle	<a href="https://psen.gnomio.com">https://psen.gnomio.com</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO 1

## Course Website (Other LMS)

Academic Year	Faculty Using ICT tools	Subject	Semester	Details	Link	PO	PSO
2019-20	Prof. Manali Patki	Gaming Architecture and Programming	8th sem IT	Schoology	<a href="https://app.schoology.com/course/2306650561/materials?f=177208019">https://app.schoology.com/course/2306650561/materials?f=177208019</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO 1
		Software Testing and Quality Assurance	7th sem IT	Schoology	<a href="https://app.schoology.com/course/2153154704/materials">https://app.schoology.com/course/2153154704/materials</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO1
		System Programming	5th sem IT	Schoology	<a href="https://app.schoology.com/course/2072701177/materials?f=162081549">https://app.schoology.com/course/2072701177/materials?f=162081549</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO 1
	Prof. Hemlata Sahu	Design & Analysis of Algorithm	5th sem IT	1. LMS: Schoology	<a href="https://www.schoology.com/">https://www.schoology.com/</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO 1
		Operating system	6th sem IT	1. LMS: Schoology	<a href="https://www.schoology.com/">https://www.schoology.com/</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO 1



	<b>Prof. Manali Patki</b>	<b>Theory of Computat ion</b>	<b>4th sem IT</b>	<b>Schoology</b>	<a href="https://app.schoology.com/course/1937979969/materials">https://app.schoology.com/course/1937979969/materials</a>	<b>PO1,PO 2,PO3,P O5,PO7 ,PO12</b>	<b>PSO1</b>
		<b>Software Testing and Quality Assurance</b>	<b>7th sem IT</b>	<b>Schoology</b>	<a href="https://app.schoology.com/assignment/1878801396/assessment_results">https://app.schoology.com/assignment/1878801396/assessment_results</a>	<b>PO1,PO 2,PO3,P O5,PO7 ,PO12</b>	<b>PSO 1</b>
		<b>System Program ming</b>	<b>5th sem IT</b>	<b>Schoology</b>	<a href="https://app.schoology.com/course/1055014948/materials?f=126453268">https://app.schoology.com/course/1055014948/materials?f=126453268</a>	<b>PO1,PO 2,PO3,P O5,PO7 ,PO12</b>	<b>PSO 1</b>

## Spoken Tutorial

Academic Year	Faculty Using ICT tools	Subject	Semester	Details	Link	PO	PSO
2020-21	Prof. Praveen Sen	Java Programming	5th sem IT	To test the knowledge gained in theory and practical of Java	<a href="https://www.spokentutorial.com">https://www.spokentutorial.com</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO1
	Prof. Hemlata Sahu	Programming Logic & Design Using C	3rd sem IT	To test the knowledge gained in theory and practical of C Programming	<a href="https://www.spokentutorial.com">https://www.spokentutorial.com</a>	PO1,PO2,PO3,PO9,PO5,PO7,PO10,PO11,PO12	PSO1
	Prof. Hemlata Sahu	Internet Programming	6th Sem IT	To test the knowledge gained in theory and practical of HTML	<a href="https://www.spokentutorial.com">https://www.spokentutorial.com</a>	PO1,PO2,PO3,PO5,PO7,PO9,PO10,PO11,PO12	PSO1
2019-20	Prof. Shabana Pathan	Programming Logic & Design Using C	3rd sem IT	PLDC-Spoken tutorial	<a href="https://www.spokentutorial.com">https://www.spokentutorial.com</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO1

	<b>Prof. Hemlata Sahu</b>	<b>Internet Programming</b>	<b>6th Sem IT</b>	<b>To test the knowledge gained in theory and practical of HTML</b>	<a href="https://www.spokentutorial.com">https://www.spokentutorial.com</a>	<b>PO1,PO2,PO3,PO5,PO7,PO9,PO10,PO11,PO12</b>	<b>PSO1</b>
	<b>Prof. Shabana Pathan</b>	<b>Programming Logic &amp; Design Using C</b>	<b>3rd sem IT</b>	<b>PLDC-Spoken tutorial</b>	<a href="https://www.spokentutorial.com">https://www.spokentutorial.com</a>	<b>PO1,PO2,PO3,PO5,PO7,PO12</b>	<b>PSO1</b>
	<b>Prof. Pooja Walke</b>	<b>PHP and MySQL</b>	<b>Even Semester</b>	<b>To test the knowledge gained in theory and practical of DBMS</b>	<a href="https://www.spokentutorial.com">https://www.spokentutorial.com</a>	<b>PO1,PO2,PO3,PO5,PO7,PO11,PO12</b>	<b>PSO1</b>
	<b>Prof. Harshala Shingne</b>	<b>Java Programming</b>	<b>5th Sem IT</b>	<b>To test the knowledge gained in theory and practical of Java</b>	<a href="https://spoken-tutorial.org">https://spoken-tutorial.org</a>	<b>PO1,PO2,PO3,PO5,PO7,PO12</b>	<b>PSO1</b>
<b>2018-19</b>	<b>Prof. Harshala Shingne</b>	<b>Object Oriented Methodology</b>	<b>4th Sem IT</b>	<b>Beyond syllabus</b>	<a href="https://spoken-tutorial.org">https://spoken-tutorial.org</a>	<b>PO1,PO2,PO3,PO5,PO7,PO12</b>	<b>PSO1</b>

## Practical Mini Project

Academic Year	Faculty Using ICT tools	Subject	Semester	Details	Link	PO	PSO
2020-21	Prof. Manali Patki	Gaming Architecture & Programming	8th sem IT	Miniproject using Unity by students	-	PO5,PO7,PO9,PO12	PSO1
	Prof. Shabana Pathan	Computer Graphics	5th sem IT	Miniproject using Animation by students	-	PO1,PO2,PO3,PO5,PO7,PO12	PSO1
2019-20			Gaming Architecture & Programming	8th sem IT	Miniproject using Unity by students	-	PO5,PO7,PO9,PO12
	Prof. Priti Golar	Data Warehousing and Mining	7th sem IT	For Curriculum	-	PO5,PO7,PO9,PO12	PSO1
	Prof. Pooja Walke						
	Prof. Hemlata Sahu	Programming Logic & Design Using C	3rd sem IT	For Curriculum	-	PO1,PO2,PO3,PO5,PO7,PO12	PSO: 1
		ADS, Internet Programming	4th and 6th sem IT		-	PO1,PO2,PO3,PO5,PO7,PO12	PSO: 1

	<b>Prof. Manali Patki</b>	<b>Program ming Logic &amp; Design Using C</b>	<b>3rd sem IT</b>	<b>For Curriculum</b>	-	<b>PO1,PO 2,PO3,P O5,PO7, PO12</b>	<b>PSO: 1</b>
	<b>Prof. Harshala Shingne</b>	<b>Internet Program ming</b>	<b>6th sem IT</b>	<b>Curriculum</b>	-	<b>PO1,PO 2,PO3,P O5,PO7, PO12</b>	<b>PSO: 1</b>
<b>2018-19</b>	<b>Prof. Shabana Pathan</b>	<b>Computer Graphics</b>	<b>5th sem IT</b>	<b>Miniproject using Animation by students</b>	-	<b>PO1,PO 2,PO3,P O5,PO7, PO12</b>	<b>PSO1</b>
		<b>Gaming Architect ure &amp;PRogra mming</b>	<b>8th sem IT</b>	<b>Miniproject using Unity by students</b>	-	<b>PO1,PO 2,PO3,P O5,PO7, PO12</b>	<b>PSO1</b>
	<b>Prof. Hemlata Sahu</b>	<b>Program ming Logic &amp; Design Using C</b>	<b>3rd sem IT</b>	<b>Curriculum</b>	-	<b>PO1,PO 2,PO3,P O5,PO7, PO12</b>	<b>PSO: 1</b>
		<b>Algorith ms and Data Structures</b>	<b>4th sem IT</b>	<b>Curriculum</b>	-	<b>PO1,PO 2,PO3,P O5,PO7, PO12</b>	<b>PSO: 1</b>

### Any other (QUIZ, Cross Word etc.)

Academic Year	Faculty Using ICT tools	Subject	Semester	Details	Link	PO	PSO
2020-21	Prof. Shabana Pathan	Computer Graphics	5th sem IT	Quiz using Moodle	<a href="https://spathan.gnomio.com">https://spathan.gnomio.com</a>	PO1,PO2,PO3	PSO1
	Prof. Priti Golar	Digital Image Processing	8th sem IT	Quiz on Image Transformation using Moodle	<a href="https://pgolar.gnomio.com/mod/quiz/view.php?id=209">https://pgolar.gnomio.com/mod/quiz/view.php?id=209</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO2
				Quiz on Colour Image Processing using Moodle	<a href="https://pgolar.gnomio.com/mod/quiz/view.php?id=212">https://pgolar.gnomio.com/mod/quiz/view.php?id=212</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO2
				Quiz on Image Restoration using Moodle	<a href="https://pgolar.gnomio.com/mod/quiz/view.php?id=248">https://pgolar.gnomio.com/mod/quiz/view.php?id=248</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO2
				Quiz on Image Segmentation using Moodle	<a href="https://pgolar.gnomio.com/mod/quiz/view.php?id=270">https://pgolar.gnomio.com/mod/quiz/view.php?id=270</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO2

		Theory of Computation	4th Sem IT	Quiz on Unit No. 5 using Moodle	<a href="https://pgolar.gnomio.com/mod/quiz/view.php?id=251">https://pgolar.gnomio.com/mod/quiz/view.php?id=251</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO2
				Quiz on Unit No. 6 using Moodle	<a href="https://pgolar.gnomio.com/mod/quiz/view.php?id=283">https://pgolar.gnomio.com/mod/quiz/view.php?id=283</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO2
	Prof. Hemlata Sahu	Programming Logic & Design Using C	3rd sem IT	Quiz using Moodle	<a href="https://hemlatasahu.gnomio.com">https://hemlatasahu.gnomio.com</a>	PO1,PO2,PO3,PO11,PO12	PSO1
	Prof. Hemlata Sahu	Design & Analysis of Algorithm	5th Sem IT	Quiz using Moodle	<a href="https://hemlatasahu.gnomio.com">https://hemlatasahu.gnomio.com</a>	PO1,PO2,PO3,PO11,PO12	PSO1
	Prof. Vishal Tiwari	Ethics in Information Technology	3rd sem IT	Quiz using Moodle	<a href="https://vtiwarisvp.cet.gnomio.com/">https://vtiwarisvp.cet.gnomio.com/</a>	PO1,PO2,PO3,PO11,PO12	PSO1
		Operating Systems	6th sem IT	Quiz using Moodle	<a href="https://vtiwarisvp.cet.gnomio.com/">https://vtiwarisvp.cet.gnomio.com/</a>	PO1,PO2,PO3,PO11,PO12	PSO1
	Prof. Hemlata Sahu	Internet Programming	6th sem IT	Quiz using Moodle	<a href="https://hemlatasahu.gnomio.com">https://hemlatasahu.gnomio.com</a>	PO1,PO2,PO3,PO11,PO12	PSO1

2019-20	Prof. Harshala Shingne	Data Commun ication	3rd sem IT	Crossword plugin of Gnomio site for data communicati on	<a href="https://datacomm unication.gnomio. com/mod/game/at tempt.php">https://datacomm unication.gnomio. com/mod/game/at tempt.php</a>	PO1,PO 2,PO3,P O5,PO7, PO12	PSO2
		Digital Image Processin g	8th sem IT	Crossword plugin of Gnomio site for digital image processing concept	-	PO1,PO 2,PO3,P O5,PO7, PO12	PSO2
2018-19		Data Commun ication	3rd sem IT	Created crossword online throughn crosswordla b.com	-	PO1,PO 2,PO3,P O5,PO7, PO12	PSO2
		Object Oriented Methodl ogy	4th Sem IT	Created crossword online throughn crosswordla b.com	-	PO1,PO 2,PO3,P O5,PO7, PO12	PSO2
	Prof. Manali Patki	System Program ming	5th Sem IT	Created crossword online throughn crosswordla b.com	-	PO1,PO 2,PO3,P O5,PO7, PO12	PSO2



## Webinar

Academic Year	Faculty Using ICT tools	Subject	Semester	Details	Link	PO	PSO
2020-21	Prof. Hemlata Sahu	Design & Analysis of Algorithm	5th sem IT	Dynamic Programming	<a href="https://www.techgig.com">https://www.techgig.com</a>	PO1,PO2,PO3,PO4,PO5,PO7,PO12	PSO1
2019-20		Internet Programming	6th Sem IT	Asynchronous programming using java script	<a href="https://www.techgig.com">https://www.techgig.com</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO1

## Self Made You Tube Video

Academic Year	Faculty Using ICT tools	Subject	Semester	Details	Link	PO	PSO
2019-20	Prof. Harshala Shingne	Digital Image Processing	8th Sem IT	Huffman coding	<a href="https://www.youtube.com/watch?v=PWj4j98qUx0">https://www.youtube.com/watch?v=PWj4j98qUx0</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO1
				Arithmetic Encoding	<a href="https://www.youtube.com/watch?v=5tog7dbehKY">https://www.youtube.com/watch?v=5tog7dbehKY</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO1
					<a href="https://www.youtube.com/watch?v=-vvgd87antk">https://www.youtube.com/watch?v=-vvgd87antk</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO1
				Chain Code	<a href="https://www.youtube.com/watch?v=q1LYyZb3mjk">https://www.youtube.com/watch?v=q1LYyZb3mjk</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO1
2018-19	Prof. Priti Golar	Data warehousing and Mining	7th Sem IT	How to create website using Word-Press	<a href="https://www.youtube.com/watch?v=Lh3Bgg5pLDA">https://www.youtube.com/watch?v=Lh3Bgg5pLDA</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO1
2018-19	Prof. Manali Patki	System Programming	5th sem IT	SP Unit 1 Lecture 1	<a href="https://www.youtube.com/watch?v=xzUcG5RNrdk">https://www.youtube.com/watch?v=xzUcG5RNrdk</a>	PO1,PO2,PO3,PO5,PO7,PO12	PSO1

## E-Notes

Academic Year	Faculty Using ICT tools	Subject	Semester	Details	Link	PO	PSO
2020-21	Prof. Shabana Pathan	Computer Graphics	5th sem IT	PPTs ,PDF	<a href="https://spathan.gnomio.com">https://spathan.gnomio.com</a>	PO1,PO2 ,PO12	PSO1
		Ecomm ERP	8th sem IT	PPTs ,PDF	<a href="https://spathan.gnomio.com">https://spathan.gnomio.com</a>	PO1,PO2 ,PO12	PSO1
	Prof. Priti Golar	Data Warehousing and Mining	7th sem IT	PPTs ,PDF, ebooks	<a href="https://pgolar.gnomio.com">https://pgolar.gnomio.com</a>	PO1,PO2 ,PO3,PO5,PO7,PO12	PSO1
		Digital Image Processing	8th sem IT	PPTs ,PDF, ebooks	<a href="https://pgolar.gnomio.com">https://pgolar.gnomio.com</a>	PO1,PO2 ,PO3,PO5,PO7,PO12	PSO1
	Prof. Hemlata Sahu	Programming Logic & Design Using C	3rd sem IT	PPTs ,PDF, ebooks	<a href="https://hemlatasahu.gnomio.com">https://hemlatasahu.gnomio.com</a>	PO1,PO2 ,PO3, PO11, PO12	PSO1
	Prof. Vishal Tiwari	Ethics in Information Technology	3rd sem IT	PPTs ,PDF, ebooks	<a href="https://vtiwarisvp.cet.gnomio.com/">https://vtiwarisvp.cet.gnomio.com/</a>	PO1,PO2 ,PO3, PO12	PSO1
		Operating Systems	6th sem IT	PPTs ,PDF, ebooks	<a href="https://vtiwarisvp.cet.gnomio.com/">https://vtiwarisvp.cet.gnomio.com/</a>	PO1,PO2 ,PO3	PSO1

	<b>Prof. Pooja Walke</b>	<b>Artificial Intelligence</b>	<b>7th sem IT</b>	<b>PPTs ,PDF, ebooks</b>	<a href="https://poojaw.gnomio.com/">https://poojaw.gnomio.com/</a>	<b>PO1,PO2 ,PO3, PO11, PO12</b>	<b>PSO1, PSO2</b>
		<b>Distributed System</b>	<b>8th sem IT</b>	<b>PPTs ,PDF, ebooks</b>	<a href="https://poojaw.gnomio.com/">https://poojaw.gnomio.com/</a>	<b>PO1,PO2 ,PO3, PO11, PO12</b>	<b>PSO1</b>
	<b>Prof. Hemlata Sahu</b>	<b>Design &amp; Analysis of Algorithm</b>	<b>5th sem IT</b>	<b>PPTs ,PDF, ebooks</b>	<a href="https://hemlatasa.hu.gnomio.com">https://hemlatasa.hu.gnomio.com</a>	<b>PO1,PO2 ,PO3, PO4, PO12</b>	<b>PSO1</b>
		<b>Internet Programming</b>	<b>6th sem IT</b>	<b>PPTs ,PDF, ebooks</b>	<a href="https://hemlatasa.hu.gnomio.com">https://hemlatasa.hu.gnomio.com</a>	<b>PO1,PO2 ,PO12</b>	<b>PSO1</b>