

Excellent Placement Record

  
Package offered  
**45.00** LPA

  
Package offered  
**22.00** LPA

  
Package offered  
**18.00** LPA

  
Package offered  
**17.50** LPA



**Diploma**

**B.Tech**

**M.Tech**

Engineering  
Booklet

*Unleashing Potential,  
Redefining Possibilities,  
Transforming Tomorrow.*

**Corporate Office :** 345, Shradha House, Kingsway, Nagpur- 440001.  
**Campus Location :** B-37-39/1, Shradha Park, MIDC, Hingna-Wadi Link Road,  
Nagpur, Maharashtra 440016.  
**Mobile :** +91 86699 89061, +91 93079 00681, +91 93079 00682  
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 /raisonniworld



## ABOUT

### RAISONI EDUCATION

Raisoni Education, a leading educational network in Central India, boasts a rich history of nurturing future leaders across various disciplines. Established in 1998 with the foundation of G H Raisoni College of Engineering in Nagpur, Raisoni Education has grown steadily, encompassing 19 institutes and 4 universities spread across six cities: Nagpur, Jalgaon, Pune, Amravati, Pandhurna, and Bhandara.

An innovative approach at every step towards success sets Raisoni Education apart. We choose to provide practically orientated education combined with a strong academic focus, developed specifically to meet industry needs.

Since the start of our journey, our motto has been **"The Vision Beyond."**

Our diversified spectrum includes various industries, from manufacturing and distribution to marketing, construction, and healthcare. With education being a significant domain, we believe we can create an impact by empowering students to achieve new milestones and lead fulfilling lives.

We are dedicated to offering a wide range of courses and fostering a vibrant campus life to ensure our students receive quality education and holistic development. We are committed to equipping our students with the knowledge, skills, and confidence to excel in their careers and contribute positively to society.

### GHRSTU

G H Raisoni Skill Tech University, Nagpur, is a Centre of Excellence in education, research, skills, and innovation. We are committed to academic excellence, catering to students across various programs. Our goal is to equip students with both theoretical knowledge and practical skills, enabling them to excel in their respective fields.

As part of the prestigious Raisoni Education, GHRSTU inherits a legacy of academic excellence and innovation. With decades of experience in shaping future-ready professionals, Raisoni Education is renowned for its commitment to quality education, industry integration, and holistic development.

Your path to Engineering excellence *begins at*  
***Raisoni Education***



## College Highlights (Raisoni Education)

GHRSTU hosts a variety of academic, cultural, and technical events that foster learning, innovation, and student engagement.

### Major College Events:

- **Antaragni** – A grand cultural fest celebrating creativity, talent, and student performances.
- **Yaadein** – A nostalgic farewell event honouring graduating students and their journey.
- **Techkrunch** – A premier technical festival showcasing innovation, hackathons, and tech-driven competitions.

## UNIVERSITIES

### Nagpur

G H Raisoni Skill Tech University

Ankush Shikshan Sanstha, Plot No.37-39/1, 39, Shradha Park, off Hingna-Wadi Link Road, Nagpur - 440016 (MH)

### Pune

G H Raisoni International Skill Tech University

SGR Foundation, At Post Kedgaon, Taluka Daund, Dist. Pune - 412203 (MH)

### Amravati

G H Raisoni University, Amravati

G H Raisoni Nagar, Anjangaon Bari Road, Amravati - 444701 (MH)

### Saikheda

G H Raisoni University, Saikheda

G H Raisoni Nagar, Dhoda Borgaon, Saikheda, Tehsil Sausar, Dist. Pandhurna - 480337 (MP)

# INFRASTRUCTURE

## Central Book Library

GHRSTU Nagpur has a central and departmental library with:

- 8,746 titles and 28,850 volumes
- National and International Journals
- A Distance Engineering Program (C-DEEP) in collaboration with IIT
- Air-cooled seating with a capacity of over 200 students

## Campus Facilities

- Modern campus with state-of-the-art amenities
- Wi-Fi-enabled campus for seamless digital learning
- Lecture Recording and Capturing System for flexible learning
- Language Lab and Media Centre for communication skills development
- Solar Plant : Sustainable energy initiatives

## Accommodation and Student Life

- Well-furnished hostels with hygienic living spaces
- Safety and security measures ensuring student well-being
- Saarthi Counselling Centre for mental health support
- Hobby and students clubs for extracurricular engagement

## Transportation

- Well-connected routes with designated stops at major city locations
- Timely service ensuring punctuality for students
- Regular maintenance and servicing to ensure vehicle safety
- Dedicated Transportation Office for student queries and support

## Laboratories

The department features three well-equipped labs:

- Engineering Physics Lab
- Waste Management and Environmental Science Lab
- Language Lab for communication skills



## Academic Excellence

- NAAC Accredited Institutions with A++, A+, and B+ Ratings
- UGC & AICTE Approved Programs
- Highly Qualified and Experienced Faculty
- Autonomous Universities Offering Cutting-Edge Curriculums



## Strong Industry Connections

- MoUs with Leading Companies for Internships & Student Development Programs
- Collaborations with TCS, Amazon, Accenture, ICICI Bank, BYJU'S, and More
- 100% Placement Assistance with High ROI on Education

## WHY RAISONI EDUCATION ?

### Infrastructure & Facilities

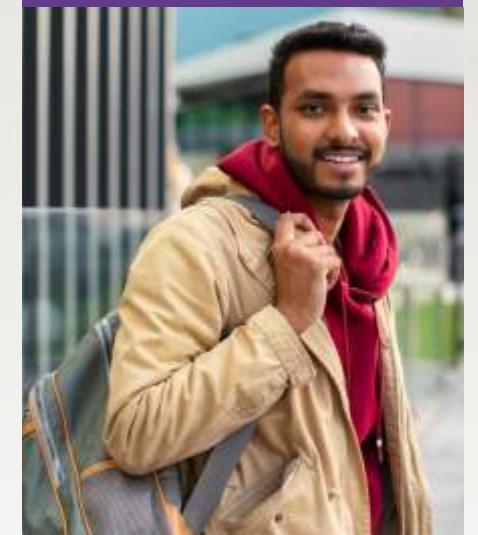
- Smart Classrooms, Hi-Tech Labs, and Research Centres
- Fully-equipped Libraries and E-learning Resources
- Wi-Fi-enabled Campuses with Hostel and Transport Facilities
- Dedicated Sports, Gym, Health & Wellness Centres

### Career Growth & Global Exposure

- International Skill Development & Exchange Programs
- Opportunities for Research, Innovation, and Patents
- Soft Skills and Personality Development Training
- Dedicated Career Guidance & Placement Cell

### Vibrant Campus Life

- Cultural and Technical Festivals
- Student Clubs, Entrepreneurship Cells and Hobby Clubs
- Leadership and Networking Opportunities



## HIGHLIGHTS (Raisoni Education)

- Flagship Institute of Raisoni Education, Ranked 67<sup>th</sup> in NIRF
- Industry-oriented Skill Development for Students
- 100+ Recruiters for the 2024-25 Session



- Successfully Conducted 5 Major Job Fairs (2024-25)
- Provides Campus Recruitment Training & Pre-assessment Exams for Students
- 80,000+ Alumni Network & 40,000+ Students

## DIPLOMA

### Specialisations

- Computer Science and Engineering (CSE)
- Artificial Intelligence (AI)

### Eligibility

- The candidate must be an Indian national.
- Candidates must have passed the 10th grade (SSC) from a recognised board.
- A minimum aggregate of 35% marks in the qualifying examination is required, depending on the program.

### Direct Second Year

- The candidate must be an Indian national.
- Candidates must have passed the 12th grade (HSC) Science / ITI (2 years) from a recognised board.
- A minimum aggregate of 40% marks in the qualifying examination is required, depending on the program

### Scope

#### Scope and Opportunities

- **Valuable Qualification** – Recognised diploma with strong practical exposure for industry jobs or higher education.
- **Higher Education** – Lateral entry into B.Tech. or AIME certification for academic growth.
- **Diverse Careers** – Jobs in aviation, automobiles, construction, railways, defence, and more.
- **Cost-Effective** – Affordable alternative to B.Tech/B.E. with strong job prospects.
- **Job Market Edge** – Hands-on training makes graduates highly employable

## Program Structure With Course Credits

Semester	Learning	Theory	Practical	Total Hours	Credits	CAE	TAE	ESE	INT	EXT	Total Marks
1 <sup>st</sup> Sem	11	3	18	32	20	80	40	280	225	175	800
2 <sup>nd</sup> Sem	11	2	20	32	21	60	30	210	275	175	800
3 <sup>rd</sup> Sem	13	4	16	33	21	80	40	280	225	200	825
4 <sup>th</sup> Sem	15	0	16	31	23	80	40	280	175	175	750

### Abbreviations :

- L** - Classroom Learning
- T** - Tutorial Learning
- P** - Laboratory Learning
- CAE** - Class Assessment Examination
- ESE** - End Semester Examination
- INT** - Internal Practical Assessment
- TAE** - Teacher's Assessment Examination (Self-Learning Assessment)
- EXT** - End Semester Practical Examination



## Key Subjects Across Semesters

### Computer Science Engineering (CSE)

#### 1<sup>st</sup> Semester

- Basic Mathematics
- Communication Skills
- Basic Science (Physics)
- Basic Science (Chemistry)
- Fundamentals of ICT
- Engineering Workshop Practices
- Yoga & Meditation
- Engineering Graphics

#### 3<sup>rd</sup> Semester

- Data Structure using C
- Database Management System
- Digital Techniques
- Object-Oriented Programming using C++
- Computer Graphics
- Essence of Indian Constitution

#### 2<sup>nd</sup> Semester

- Applied Mathematics
- Basic Electrical and Electronics Engineering
- Programming in C
- Linux Basics
- Professional Communication
- Social and Life Skills
- Web Page Designing

#### 4<sup>th</sup> Semester

- Environmental Education and Sustainability
- Java Programming
- Data Communication & Computer Networks
- Microprocessor Programming
- Python Programming
- UI/UX Design

## Artificial Intelligence

### 1<sup>st</sup> Semester

- Basic Mathematics
- Communication Skills
- Basic Science (Physics)
- Basic Science (Chemistry)
- Fundamentals of ICT
- Engineering Workshop Practices
- Yoga & Meditation
- Engineering Graphics

### 3<sup>rd</sup> Semester

- Database Management System
- Digital Techniques
- Data Structure using Python
- Statistical Modelling for Machine Learning
- Essence of Indian Constitution
- Data Storytelling and Visualisation

### 2<sup>nd</sup> Semester

- Applied Mathematics
- Basic Electrical and Electronics Engineering
- Programming in C
- Linux Basics
- Professional Communication
- Social and Life Skills
- Web Page Designing

### 4<sup>th</sup> Semester

- Environmental Education and Sustainability
- Java Programming
- Data Communication & Computer Networks
- Mathematics for Machine Learning
- Microprocessor Programming
- UI/UX Design

## Job-Oriented Certifications

- Basics of MATLAB Programming
- Basics of Robotics & Automation
- Certification in Blockchain Technology
- Real Estate Management (Liasoning and Consultancy)
- Certification in Machine Learning
- Certification in Python
- Certification in CNS Technology
- Certification in CAD & FMS
- Certification in iOS & Android Application Development
- Certification in MEAN Stack Development
- Electric Vehicle Technology
- Electric Vehicle Design
- Certification in Digital Marketing
- Advanced Certification in Digital Marketing
- Basic Drone Design

## Our Placements

### Placement Highlights (Raisoni Education)

#### Petrofac Engineering India Pvt. Ltd.

Role : Diploma Trainee / Graduate Engineer Trainee  
Salary Package : ₹ 4.20 - ₹ 7.00 LPA

#### Aerosys HVAC Solutions

Role : HVAC Commissioning & Audit Engineer  
Salary Package : ₹ 3.50 - ₹ 4.50 LPA

#### Verve Tronics Imagineering Pvt. Ltd.

Role : Embedded Software / Hardware Engineer  
Salary Package : ₹ 2.40 - ₹ 4.00 LPA

#### Sutherland

Role : Customer Support Associate  
Salary Package : ₹ 2.80 LPA



## B. TECH

### Specialisations

- Computer Science and Engineering (CSE)
- CSE (Artificial Intelligence)
- CSE (Data Science)
- CSE (Cyber Security)
- Information Technology (IT)
- Electronics & Telecommunication Engineering (ETC)
- Civil Engineering
- Mechanical Engineering
- Electrical Engineering

### Eligibility

- The candidate must be an Indian national.
- The candidate must have passed the HSC or equivalent examination from a recognised board.
- The candidate must have secured 45% marks for the general category and 40% for the reserved category in Physics and Mathematics (compulsory) with one of Chemistry / Biology / Technical Vocational Subjects.

### Scope



#### Career Prospects

Strong placements, high-paying jobs, and industry internships.



#### Higher Education & Research

Doctoral studies, research projects, & global collaborations.



#### Entrepreneurship

Incubation support, mentorship, and startup funding.



#### Multi-disciplinary Learning

Industry-relevant training, soft skills, and emerging technologies.



#### Global Opportunities

International training, student exchanges, and language programs.

### Course USPs

#### 1. Industry-Oriented Learning

- Six-month industry internship for real-world exposure
- Honours and Minor degree options for academic flexibility
- Hands-on practice with activity-based and project-based learning
- Continuous evaluation to ensure consistent progress
- Choice-Based Relative Grading Credit System for academic flexibility

#### 2. Innovation and Entrepreneurship

- Incubation Centre with multiple startups in progress
- Centre of Excellence (COE) for research and development
- State-of-the-art labs, including:
  - BOT Lab
  - Solar Laboratory
  - 3D Printing Machine

#### 3. Career and Placement Support

- 100% placement assistance to ensure strong career opportunities

## Scheme of the Program

- The B.Tech program is structured across eight semesters.
- It includes core subjects, electives, skill enhancement courses, laboratory work, and project-based learning.

### Program Structure:

1. Basic Science Courses (BSC) – Fundamental Scientific Concepts.
2. Engineering Science Courses (ESC) – Core Engineering Principles.
3. Professional Core Courses (PCC) – Domain-specific Technical Knowledge.
4. Humanities and Social Sciences (HSS) – Development of Soft Skills and Ethics.
5. Electives (Professional and Open Electives) – Specialisation and Interdisciplinary Learning.
6. Internships and Major Projects – Hands-on experience and industry exposure.

## Program Structure with Course Credits

- The B.Tech program follows a structured semester-wise credit system, ensuring a balanced mix of theory, practical learning, and project work.

### Semester-wise Course Credits

Sem	Course Category	Course Title	Course Code	L	T	P	Credits
I	BSC	Engineering Physics	23BTSHL101	3	1	2	4
I	BSC	Environmental Chemistry	23BTSHL102	2	1	2	3
I	BSC	Mathematics - I	23BTSHL103	2	1	0	3
I	ESC	Computer Programming	23BTCCL102	1	0	2	2
I	ESC	Engineering Graphics	23BTECL104	2	0	2	3
II	ESC	Basic Electrical Engineering	23BTECL105	3	0	2	4
II	ESC	Data Structures	23BTCCL106	3	0	2	4
III	PCC	Digital Logic Design	23BTECL201	3	0	2	4
III	PCC	Object-Oriented Programming	23BTCCL202	3	0	2	4
III	PCC	Computer Networks	23BTCCL203	3	0	2	4
IV	PCC	Operating Systems	23BTCCL204	3	0	2	4
IV	PCC	Database Management System	23BTCCL205	3	0	2	4
V	Elective	Artificial Intelligence	23BTDSL301	3	0	2	4
V	Elective	Cloud Computing	23BTDSL302	3	0	2	4
VI	Elective	Machine Learning	23BTDSL401	3	0	2	4
VI	Elective	Internet of Things	23BTDSL402	3	0	2	4
VII	Project	Minor Project	23BTPRJ501	0	0	6	6
VIII	Project	Major Project	23BTPRJ601	0	0	12	12

### Legend:

- **L** – Lecture Hours
- **T** – Tutorial Hours
- **P** – Practical Hours
- **Credits** – Total Course Credits

## Key Subjects Across Semesters

### 1<sup>st</sup> Semester

1. **Engineering Physics**  
Topics: Electron Ballistics, Optoelectronic Devices, Laser, Quantum Mechanics
2. **Environmental Chemistry**  
Topics: Water Treatment, Waste Management, Pollution Control, Battery Technology
3. **Matrices and Differential Calculus**  
Topics: Matrices, Eigenvalues, Calculus, Vector Calculus
4. **Engineering Mechanics**  
Topics: Force System, Equilibrium, Centroid, Virtual Work
5. **Computer Programming**  
Topics: C Programming, Data Structures, Functions, Arrays, Pointers
6. **Digital Logic Design**  
Topics: Number Systems, Boolean Algebra, Combinational and Sequential Circuits
7. **Foundation of Data Analytics**  
Topics: Descriptive and Inferential Statistics, Regression, Data Visualisation
8. **Communication Skills**  
Topics: Verbal and Written Communication, Presentations, Group Discussions

### 2<sup>nd</sup> Semester

1. **Differential Equations and Statistics**  
Topics: Multiple Integrals, Differential Equations, Statistics
2. **Introduction to Data Science**  
Topics: Data Wrangling, Machine Learning Basics, Data Visualisation
3. **Water Resources Engineering**  
Topics: Hydrology, Irrigation, Water Conservation Techniques
4. **Data Science Tools**  
Topics: Python, R, SQL, Big Data Tools
5. **3D Printing (Skill Enhancement Elective)**  
Topics: CAD, Slicing, Additive Manufacturing
6. **Introduction to Cyber Security**  
Topics: Threats, Vulnerabilities, Ethical Hacking, Cryptography

### Additional Details :

#### Each Subject Includes :

- Theory hours and Practical hours
- Evaluation scheme
- Course objectives
- Reference books

## Job-Oriented Certifications

### Technical and Programming Certifications

- Basics of MATLAB Programming
- Basics of Robotics and Automation
- Certification Course in Blockchain Technology
- Certification Course in Machine Learning
- Certification Course in Python
- Certification Course in iOS and Android Application Development
- Certification Course in MEAN Stack Development

### Engineering and Design Certifications

- Certificate Course on CAD and FMS (Flexible Manufacturing Systems)

- Basic Drone Design
- Electric Vehicle Technology
- Electric Vehicle Design

### Industry-Specific and Management Certifications

- Real Estate Management (Liasoning & Consultancy)
- Certificate Course on CNS Technology (Communication, Navigation and Surveillance Technology)

### Digital Skills and Marketing Certifications

- Certificate Course in Digital Marketing
- Advanced Certification in Digital Marketing



## OUR PLACEMENTS

### Placement Highlights (Raisoni Education)

Our students have secured prestigious placements with top companies, earning competitive salary packages:

Mr Mayur Patil

placed in



with the package of

**45.00 LPA**



<p><b>₹ 7.00 LPA</b></p> <p><b>Vedant G. Makwana</b> Accenture Information Technology Engineering</p>	<p><b>₹ 5.25 LPA</b></p> <p><b>Atharv N. Kolhe</b> Bluestar Mechanical Engineering</p>	<p><b>₹ 7.50 LPA</b></p> <p><b>Jayendra M. Welekar</b> Capgemini Artificial Intelligence, B.Tech</p>	<p><b>₹ 6.75 LPA</b></p> <p><b>Aman B. Tiwari</b> Cognizant Cyber Security, B.Tech</p>	<p><b>₹ 9.00 LPA</b></p> <p><b>Prisha Negi</b> HSBC Technology India Data Science, B.Tech</p>
<p><b>₹ 14.25 LPA</b></p> <p><b>Soumya Lokhande</b> Nvidia Information Technology Engineering</p>	<p><b>₹ 17.75 LPA</b></p> <p><b>Aaliya Ali</b> JP Morgan Chase &amp; Co. Computer Science and Engineering</p>	<p><b>₹ 11.77 LPA</b></p> <p><b>Anshuman Kumar</b> Amadeus Labs Computer Science and Engineering</p>	<p><b>₹ 17.75 LPA</b></p> <p><b>Raunak Gautam</b> JP Morgan Chase &amp; Co. Computer Science and Engineering</p>	<p><b>₹ 8.00 LPA</b></p> <p><b>Maitreyee C. Wahan</b> Byjus Electrical Engineering</p>

## M. TECH

### Specialisations

- CAD-CAM (Mechanical Engineering)
- Computer Science and Engineering
- VLSI (Electronics / ETC / Electronics & Communication Engineering)
- Structural Engineering (Civil Engineering)

### Eligibility

- The candidate must be an Indian national.
- The candidate must have passed the HSC or equivalent examination from a recognised board.
- The candidate must have secured 45% marks for the general category and 40% for the reserved category in Physics and Mathematics (compulsory) with one of Chemistry / Biology / Technical Vocational Subjects.

### Scope



#### Career Advancement

Opens doors to senior-level roles in Engineering, research, and development.



#### Global and Research Opportunities

International demand for postgraduates and involvement in scientific advancements.

## Course USPs

- **Expertise and Specialisation** – Advanced knowledge in CSE, Electrical, Chemical, and Civil Engineering.
- **Better Career Prospects** – Opens doors to core engineering roles and emerging fields like AI and Robotics.
- **Higher Earnings** – Specialised skills lead to lucrative opportunities in domestic and international markets.
- **Research and Development** – Prepares graduates for R&D, academia, and government roles.
- **Skill Enhancement** – Focus on problem-solving, analytical thinking, and research methodologies.
- **Government Support** – Scholarships and grants make M.Tech more accessible.
- **Versatile Careers** – Opportunities in engineering, research, management, and entrepreneurship.

## Scheme of the Program

Semester	Hours	Credits	Marks
I	23	20	600
II	23	20	600
III	10	10	150
IV	10	10	300
<b>Total</b>	<b>66</b>	<b>60</b>	<b>1650</b>

## Key Subjects Across Semesters

### VLSI

#### 1<sup>st</sup> Semester

- VLSI Subsystem Design (Paper Pen)
- Embedded Systems and Controllers (Practical Application-Based Online)
- Elective-I (Paper Pen / Online)
- Elective-II (Paper Pen / Online)
- Elective-III (Paper Pen / Online)
- Laboratory-I (Practical)
- GP-I (Advanced Communication) (Practical)

#### 2<sup>nd</sup> Semester

- Analog VLSI Design (Paper Pen)
- Modeling of Digital Systems (Paper Pen)
- Elective-IV (Paper Pen/Online)
- Elective-V (Paper Pen/Online)
- Elective-VI (Paper Pen/Online)
- Laboratory-II (Practical)
- GP-II (Research and Methodology) (Practical)

#### 3<sup>rd</sup> Semester (Practical)

- Dissertation Phase – I

#### 4<sup>th</sup> Semester (Practical)

- Dissertation Phase – II

### Electives

#### Elective-I

- Real-Time Operating Systems
- Advanced Image Processing and Computer Vision
- Digital Systems Design
- Digital Signal with FPGA

#### Elective-II

- Software Technology for Embedded Systems
- Audio & Speech Signal Processing
- Probability and Statistics
- ASIC and CAD IC Design

#### Elective-III

- Reconfigurable Computing and High-Speed Devices
- DSP System Design & Implementation
- Machine Learning & its Applications
- Verilog HDL

#### Elective-IV

- Advanced Embedded Algorithms
- Linear Algebra and Numerical Methods
- Pattern Recognition Techniques
- Advanced Microprocessors and Nanotechnology

#### Elective-V

- Real-Time Signal Processing and Embedded Systems
- Optimisation Techniques
- Advanced Machine Learning and Deep Learning
- Low Power VLSI Design

#### Elective-VI

- Cloud Computing & Applications
- Human Machine Interface
- Big Data Analytics and Business Intelligence
- VLSI Design and Test Flow with Fault Tolerance

### Computer Science Engineering

#### 1<sup>st</sup> Semester

- Advances in Algorithm (Theory and Practical)
- Distributed Operating System
- Elective I
- Elective II
- Elective III
- Computing Lab-I
- Advanced Communication Skills

#### 2<sup>nd</sup> Semester

- High-Performance Computer Architecture
- Big Data Analytics
- Elective IV
- Elective V
- Elective VI
- Mini Project
- Research Methodology

#### 3<sup>rd</sup> Semester (Practical)

- Industry / Research Project Dissertation (Phase I)

#### 4<sup>th</sup> Semester (Practical)

- Industry / Research Project Dissertation (Phase II)

### Electives

#### Elective-I

- Network Engineering and Management
- Embedded Systems
- Soft Computing
- Visualisation Techniques
- Parallel Programming
- Discrete Structures

#### Elective-II

- Network Security & Cryptography
- Data Mining & Warehousing
- Mobile & Pervasive Computing
- Pattern Recognition
- Computer Vision
- Intelligent Systems
- Computer Law and Ethics

#### Elective-III

- Human-Computer Interaction
- Natural Language Processing
- Cloud Computing & Virtualisation
- Reconfigurable Computing
- Graph Theory

#### Elective-IV

- Advanced Digital Image Processing
- Ubiquitous Computing
- Computer Simulation and Modelling
- Voice over IP
- Game Theory
- Algorithms for Bioinformatics
- Distributed Computing

#### Elective-V

- Bioinformatics
- Research Methodology
- Object-Oriented Software Design
- Machine Learning
- Mobile Operating Systems
- Data Science

#### Elective-VI

- Ethical Hacking and Digital Forensics
- Artificial Intelligence
- Optimisation Techniques
- Wireless Sensor Networks
- Data Compression
- Quantum Computing
- Advanced Graph Theory

### CAD-CAM

#### 1<sup>st</sup> Semester

- Computer Graphics for CAD/CAM (Theory and Practical)
- CNC and Robotics (Theory and Practical)
- Elective I
- Elective II
- Elective III
- Advanced Communication Skills

#### 2<sup>nd</sup> Semester

- Product Design and Development (Theory and Practical)
- Finite Element Analysis (Theory and Practical)
- Elective IV
- Elective V
- Elective VI
- Research Methodology

#### 3<sup>rd</sup> Semester (Practical)

- Industry Project Dissertation / Research (Phase I)

#### 4<sup>th</sup> Semester (Practical)

- Industry Project Dissertation / Research (Phase II)

### Electives

#### Elective-I

- Computer Integrated Manufacturing
- Project Management and Finance
- Total Quality Systems and Engineering

#### Elective-II

- Data Structures & Algorithms
- Artificial Intelligence and Expert Systems
- Product Data Management

#### Elective-III

- Optimisation Techniques
- Design of Experiments
- Vibration Analysis & Condition Monitoring

#### Elective-IV

- Modeling and Simulation
- Computational Methods for Design
- Computer-Aided Tool Design

#### Elective-V

- Plastics and Composites
- Manufacturing System Integration and Management
- Fracture Mechanics & Fatigue

#### Elective-VI

- Advanced Machine Design
- Design of Piping Systems
- Design of Material Handling Systems
- Introduction to Design Thinking

### Structural Engineering

#### 1<sup>st</sup> Semester

- Advanced Communication Skills
- Computational Techniques
- Structural Dynamics (Theory and Practical)
- Matrix Analysis of Structures
- Theory of Elasticity and Elastic Stability
- Elective I

#### 2<sup>nd</sup> Semester

- Theory of Plates and Shells
- Finite Element Method (Theory and Practical)
- Earthquake Resistant Design of RC Structures
- Elective II
- Elective III
- Research Methodology

#### 3<sup>rd</sup> Semester (Practical)

- Research / Industry Project Dissertation (Phase I)

#### 4<sup>th</sup> Semester (Practical)

- Research / Industry Project Dissertation (Phase II)

### Electives

#### Elective-I

- Design of Steel Structures
- Structural Stability
- New Engineering Materials and Techniques
- Disaster Management
- Design of Bridges and Retaining Walls
- Wind Effects on Structures

#### Elective-II

- Design of Substructure
- Prestressed Concrete Structures
- Advanced Design of Steel Structures

#### Elective-III

- Soil-Structure Interaction
- Building Information Modeling
- Analysis & Design of Industrial Structures
- Forensic Engineering and Rehabilitation of Structures
- Advanced Structural Dynamics
- Advanced Design of RCC Structures

## Job-oriented Certifications

### Programming and AI

- Basics of MATLAB Programming
- Certification Course in Python
- Certification Course in Machine Learning
- Certification Course in Blockchain Technology
- Certification Course in iOS and Android Application Development
- Certification Course in MEAN Stack Development

### Engineering and Automation

- Basics of Robotics and Automation Course
- Certificate Course on CAD and FMS
- Electric Vehicle Technology
- Electric Vehicle Design
- Certificate Course on CNS Technology

### Business and Digital Skills

- Real Estate Management (Liasoning and Consultancy)
- Certificate Course in Digital Marketing
- Advanced Certification Course in Digital Marketing

### Emerging Technologies

- Basic Drone Design



## Our Placements

### Placement Highlights (Raisoni Education)

<b>₹ 11.00 LPA</b> <b>IBM</b> Software Engineer	<b>₹ 9.5 LPA</b> <b>Infosys</b> Specialist Programmer	<b>₹ 9.00 LPA</b> <b>Intellipaath</b> Business Development Associate	<b>₹ 10.96 LPA</b> <b>Jaro Education</b> Management Trainee & Graduate Trainee
<b>₹ 12.05 LPA</b> <b>Josh Technology Group</b> Front End Developer	<b>₹ 3.6 LPA</b> <b>Sagacious Research</b> Patent Analyst Intern	<b>₹ 5.00 LPA</b> <b>Sasken</b> Associate Software Engineer	<b>and many more...</b>

## Industry Connect (Raisoni Education)

### Key Industry Partners and Collaborations:

#### Corporate and IT Sector

- Amazon
- TCS
- Tech Mahindra
- IBM
- Cybage
- Capgemini
- Godrej and Boyce
- Accenture
- Wipro
- Infosys
- Cognizant
- Mercedes-Benz
- Bitwise
- ICICI Bank
- Bharati Infrastructure
- Ventura Securities Ltd.

#### Technology and Research Centres

- RRSC-ISRO (Regional Remote Sensing Centre, ISRO)
- Command and Control Centre of Nagpur Smart City

#### Local and Industrial Collaborations

- IPCS Global, Nagpur
- Networkz Infosystem Pvt Ltd
- Ankhub Technology Pvt Ltd
- Wanadongri Substation
- Metro Bhavan, Diksha Bhumi Nagpur

#### Entrepreneurship and Startups

- M/S Shivam Foods (Food and Beverage Industry)

## Internship Companies (Raisoni Education)

#### Top Internship Partners:

- Amazon
- TCS
- Tech Mahindra
- IBM
- Cybage
- Capgemini
- Godrej and Boyce
- Accenture
- Wipro
- Infosys
- Cognizant
- Mercedes-Benz
- Bitwise
- ICICI Bank
- Bharati Infrastructure
- Ventura Securities Ltd.
- And many more...

These internships provide students with hands-on industry exposure, mentorship, and skill development, bridging the gap between academics and professional success.

## Successful Alumni (Raisoni Education)

GHRSTU Nagpur takes pride in its alumni, who have made a significant impact across various industries worldwide.

#### Successful Alumni :

- **Rushabh Gandhi**  
Senior Software Engineer, Remitly – Greater Seattle Area, USA
- **Pooja Akhoury**  
Radio Compliance Test Engineer, Microsoft – Redmond, Washington, USA
- **Niyanta Shetye**  
Academic Employee, Technische Universität Cottbus-Senftenberg – Brandenburg, Germany
- **Zeeshan Pathan**  
Group MD and CEO, World Development Corporation – Mumbai, India
- **Poorva Pantane**  
Supply Chain Consulting Practice Lead, Tata Consultancy Services – Sydney, Australia  
Bachelor of Engineering, Computer Technology (2004), G H Raisoni College of Engineering, Nagpur

## Top Recruiters (Raisoni Education)

Our graduates are recruited by leading national and multinational companies, including:



And many more...



## Autonomous Vs RTMNU Difference

Feature	RTMNU (Rashtrasant Tukadoji Maharaj Nagpur University)	Autonomous University
<b>Curriculum Control</b>	Limited flexibility in changing curriculum due to external regulations.	Greater control over curriculum and academic programs, allowing flexibility.
<b>Administrative Freedom</b>	Subject to external administrative regulations and oversight.	More autonomy in hiring, budgeting, and infrastructure development.
<b>Research Opportunities</b>	Fewer resources and opportunities for research.	Better access to research funding and industry collaborations, leading to increased research output.
<b>Quality Control</b>	Quality control may be influenced by external authorities.	Implements rigorous quality control mechanisms to maintain high academic standards.
<b>Decision-making</b>	Slower decision-making due to external bureaucracy.	Faster decision-making as decisions are made independently.
<b>Industry Collaboration</b>	Limited ability to independently engage with industry.	Establishes strong industry partnerships for internships and job placements.
<b>International Recognition</b>	Limited international recognition.	Can gain global recognition if high academic standards are maintained.
<b>Accreditation and Standards</b>	Governed by external accreditation bodies.	Sets its own quality assurance and accreditation standards.

## Benefits of an Autonomous University

- **Self-Governance and Internal Evaluation** – Universities set their own rules and conduct internal assessments.
- **Updated Syllabus** – Curriculum is regularly revised to stay relevant to industry trends.
- **Industry-Aligned Curriculum** – New topics are incorporated as per market demand.
- **In-house Examinations** – Exams are conducted internally, ensuring flexibility and efficiency.
- **Innovation and Research Focus** – Encourages new technologies and research-driven learning.
- **High-Standard MoUs** – Collaborations with top industries and institutions.
- **Emphasis on Quality Education** – Prioritises academic excellence and skill development.
- **Higher Placement Rates** – Stronger placement drives compared to RTMNU.
- **Government and Research Funding** – Receives funding from AICTE, UGC, and NBA for student research projects.
- **Fast Re-Examinations** – Allows students to retake exams without long delays.
- **Global Recognition** – Increased opportunities for international collaborations and recognition.
- **Strong Industry Partnerships** – Provides internships and job placements through industry tie-ups.

## Workshops and Expert Sessions

GHRSTU regularly conducts workshops, expert lectures, and conferences to enhance students' technical skills and industry knowledge.

- **Awareness Program on Open Electives** – Through MOOC-NPTEL Online Courses and Certification
- **Blockchain Workshop** – Organised by AI Department
- **Expert Lecture** – Conducted by Cyber Security Department
- **Project Quality Assurance Initiative**
- **International AI Summit #3** – Hosted by AI Department
- **Two-Day International Conference** – Focused on Artificial Intelligence and Quantum Computation-Based Sensor Applications

## Laboratory Facilities at GHRSTUN

GHRSTU offers well-equipped laboratories to provide hands-on training and research opportunities in emerging technologies.

### Key Laboratories:

- **BOT Lab** – Specialises in Robotic Process Automation training and research.
- **Solar Laboratory** – Focused on renewable energy research and solar technology.
- **3D Printing Lab** – Equipped with advanced additive manufacturing and CAD tools.
- **Drone and Robotics Lab** – Provides training in unmanned aerial vehicles (UAVs) and robotics.
- **Blockchain Technology Lab** – Dedicated to cryptography, decentralised systems, and blockchain applications.
- **AR/VR Lab** – Supports innovation in Augmented Reality (AR) and Virtual Reality (VR) technologies.

The admission process at G H Raisoni Skill Tech University (GHRSTU) follows a structured approach to ensure transparency and merit-based selection.



## Testimonials (Raisoni Education)

“ Ankita Murthy

"Raisoni Education has enriched my education, and it will always be the best experience of my life. For any institute, the faculty serves as the pillar of strength and guidance, and Raisoni Education faculty perfectly exemplifies this. The support we received helped us step into the challenging world outside of the institute with confidence. During the course, we were exposed to a plethora of technical and managerial aspects, making learning easier and more promising. Now, working in an IT firm, I realise how well I have been groomed to stand tall amidst challenges and continue on my path to success. Thank you, Raisoni Education!"

“ Sudiksha Ghai

"My journey at Raisoni Education has been incredible. As a student of Computer Science and Engineering, the college provided me with a broad platform to explore and master my field. The well-structured study environment made learning seamless, and the institute instilled a spirit of excellence and competitiveness in us. What truly amazes me is the variety of co-curricular activities that Raisoni Education offers, encouraging every student to explore their talents. The balance between academics and extracurriculars is maintained with excellence, offering students endless opportunities, both technical and otherwise."

## Documents Required

- **Mark Sheets:** All mark sheets from SSC (10th) onwards.
- **Entrance Exam Scorecards:** CUET Scorecard (if any) / SAT Scorecard (if any) / MHT-CET 2025 Score Card / JEE (Main) 2025 Score Card (if any).
- **Leaving Certificate:** Issued by the previous institution.
- **Migration Certificate:** Required for students from other boards / universities.
- **AADHAR Card:** Copy of AADHAR card for the student, father, and mother.
- **Gap Certificate:** Applicable only for candidates with an academic gap.
- **Passport-Size Photographs:** Recent passport-size photograph with the student's signature.
- **Caste Certificate:** Only for reserved category students as per eligibility criteria.
- All documents must be submitted in original form along with self-attested photocopies for verification.

## Raisoni Education

### NAGPUR

- G H Raisoni College of Engineering
- G H Raisoni College of Engineering & Management
- G H Raisoni College of Business Management, Khaperkheda
- G H Raisoni College of Arts Commerce, and Science
- G H Raisoni College of Business Management, Madhav Nagari
- G H Raisoni College of Law
- G H Raisoni College of Life Sciences
- Sadabai Raisoni Women's College
- G H Raisoni Junior College
- G H Raisoni Public School (CBSE)
- G H Raisoni Public School & Jr. College (State)

### PUNE

- G H Raisoni College of Engineering & Management
- G H Raisoni College of Arts, Commerce & Science
- G H Raisoni Junior College (State)
- G H Raisoni Public School (CBSE)

### JALGAON

- G H Raisoni College of Engineering & Management
- G H Raisoni Junior College (State)
- G H Raisoni Public School (CBSE)

### BHANDARA

- G H Raisoni Public School



## Our Universities

### G H RAISONI UNIVERSITY, SAIKHEDA

- School of Engineering & Technology
- School of Commerce & Management
- School of Sciences
- School of Law
- School of Agricultural Sciences
- School of Pharmacy
- School of Nursing
- School of Paramedical Sciences
- School of Liberal Arts

### G H RAISONI UNIVERSITY, AMRAVATI

- School of Engineering & Technology
- School of Management Studies
- School of Hotel Management & Catering Technology
- School of Law
- School of Sciences
- School of Pharmacy
- School of Media Studies

### G H RAISONI INTERNATIONAL SKILL TECH UNIVERSITY, PUNE

- School of Engineering & Technology
- School of Management
- School of Sciences
- School of Skills and Development

### G H RAISONI SKILL TECH UNIVERSITY, NAGPUR

- School of Engineering & Technology
- School of Commerce & Management
- School of Sciences
- School of Hotel Management & Catering Technology