



#### 4-YEAR

 B. Sc. (H) Anaesthesia & Operation Theatre Technology (AOTT)

> B. Sc. (H) Medical Laboratory Technology (MLT)

> > B. Sc. (H) Cardiovascular Technology (CVT)

> > > B. Sc. (H) Respiratory Technology (RT)

#### SCHOOL OF ALLIED HEALTH SCIENCE

POWERED BY

APPLY FOR AJUCET 2025



# Join Us ON YOUR JOURNEY *To Success!*

#### ABOUT ARKA JAIN UNIVERSITY

ARKA JAIN University was established in the year 2017 by the Jharkhand State Legislature under **"The ARKA JAIN University Act" and is** recognized by UGC.

Located in the tribal district Seraikela-Kharsawan, it is the first state private university in the Kolhan region (comprising of three districts) of the state.

Accredited with NAAC 'A' Grade in the first cycle, the first state private university in Bihar, Jharkhand and West Bengal to have this distinction.

The University has its root in the prestigious JAIN Group of Instutions, Bengaluru which has 77-plus educational institutions under its fold.

It is mentored by JAIN (Deemed-to-Be-University), Bengaluru, a NAAC A++ and NIRF Top-100 HEI.

The university has the necessary affiliations, recognitions and memberships from different bodies such as AICTE, BCI, PCI, OCI, INC, JNRC, AIU, ASCO.

#### ILLUSTRIOUS LEGACY

ARKA JAIN University is part of the famed JAIN Group of Institutions, Bengaluru and mentored by JAIN (Deemed-to-be-University), Bengaluru

#### 2 WHAT EMBODIES OUR IDENTITY

NAAC-A Grade Accreditation, Academic Excellence, Diverse Program Options, Industry-ready Graduates – We have' em All!

#### NAAC A GRADE

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Accredited with A Grade by NAAC in the first cycle with a CGPA Score of 3.15 / 4.0  $\,$ 

#### **52ND BEST PRIVATE UNIVERSITY IN INDIA**

in the India Today-MDRA Best Universities 2024 Rankings!

#### **38TH BEST PRIVATE UNIVERSITY IN INDIA**

in the latest THE WEEK-Hansa Research Best Universities Survey 2025

#### **ISO-CERTIFIED**

ISO 21001:2018 Certified "Educational Organization Management System" University

#### AIU MEMBER

Member of Association of Indian Universities

#### 8 60+ MOUS

Learn from the best, network with the brightest

#### 9

Robust Campus Recruitment

₹23 LPA Highest Package, 2500+ Placements and 500+ Companies visited till date



# REASONS TO BE A PART OF ARKA JAIN UNIVERSITY

First NAAC 'A' Grade Accredited State Private University (in the First Cycle) in Bihar, Jharkhand & West Bengal.

Part of the JAIN Group of Institutions, Bengaluru; Mentored by NAAC A++ and NIRF-Top 100 JAIN (Deemed-to-be-University), Bengaluru

Member - Association of Indian Universities (AIU)

60+ MOUs (International & National) with Corporate and Academic Partners

ISO 21001:2018 Certified "Educational Organization Management System" University

# SCHOOL OF ALLIED HEALTH SCIENCE

The School of Allied Health Science at ARKA JAIN University offers cutting-edge

B. Sc. (Hons.) degree programs across high-demand healthcare fields, designed to prepare students for essential, behind-the-scenes roles in the medical ecosystem.

Powered by Emversity, a reputed industry partner for experiential and techenabled healthcare education, the school blends academic rigor with hands-on clinical training.

#### THE FOLLOWING BACHELOR OF SCIENCE (HONS.) PROGRAMS ARE OFFERED THROUGH SPECIALIZED DEPARTMENTS:

#### DEPARTMENT OF MEDICAL LABORATORY TECHNOLOGY

#### B. SC. (HONS.) IN MEDICAL LABORATORY TECHNOLOGY (MLT)

Gain expertise in clinical lab testing, pathology, microbiology, and diagnostic reporting.

#### DEPARTMENT OF ANAESTHESIA & OPERATION THEATRE TECHNOLOGY

#### B. SC. (HONS.) IN ANAESTHESIA & OPERATION THEATRE TECHNOLOGY (AOTT)

Train in anaesthesia administration support, pre-op/post-op monitoring, and surgical room operations.

#### DEPARTMENT OF CARDIOVASCULAR TECHNOLOGY

#### B. SC. (HONS.) IN CARDIOVASCULAR TECHNOLOGY (CVT)

Learn diagnostic and inter-ventional procedures used in cardiac care settings.

#### DEPARTMENT OF RESPIRATORY THERAPY

#### B. SC. (HONS.) IN RESPIRATORY THERAPY (RT)

Master techniques in managing respiratory distress, ventilator care, and emergency airway support.

Each program emphasizes lab-based learning, hospital-based clinical exposure, and technology-led skill development, equipping students to work in hospitals, research labs, surgical units, diagnostic centers, ICUs, and emergency care departments.





- DURATION: 4 years | SEMESTER: 8 (Eight)
- **DEGREE AWARDED BY** : ARKA JAIN University, Jharkhand
- ELIGIBILITY CRITERIA : A candidate should have passed Senior Secondary Examination (10 + 2) with Science from any recognized Board and should have a valid score card of the entrance exam conducted by the university AJU-Combined Entrance Test (AJUCET) or Common University Entrance Test (CUET) by National Testing Agency (NTA).

#### WHY STUDY AT THE SCHOOL OF ALLIED HEALTH SCIENCE, AJU?

Choosing the School of Allied Health Science at AJU means embarking on a career-focused academic journey that blends healthcare innovation with industry-aligned training. Powered by Emversity, the school ensures students are equipped not just with knowledge—but with the tools, exposure, and support to thrive in the healthcare sector.

- POWERED BY EMVERSITY A FUTURE-READY LEARNING ECOSYSTEM : Through our partnership with Emversity, students benefit from experiential, technology-driven education including digital platforms, simulation-based training, and a personal study laptop to support learning anywhere, anytime.
- SPECIALIZED, HIGH-DEMAND PROGRAMS : Our B.Sc. (Hons.) programs in Cardiovascular Technology (CVT), Respiratory Therapy (RT), Anaesthesia & Operation Theatre Technology (AOTT), and Medical Lab Technology (MLT) are designed to fill critical roles in hospitals and healthcare systems worldwide.
- MODERN CLASSROOMS & SMART INFRASTRUCTURE : All classrooms are fully equipped with modern teaching aids and smart infrastructure, enabling interactive and immersive learning experiences aligned with today's healthcare demands.
- HANDS-ON CLINICAL EXPOSURE FROM EARLY SEMESTERS : Students receive practical training in hospital environments under expert supervision—applying classroom knowledge to real clinical scenarios in ICUs, diagnostic labs, OT suites, and emergency units.
- ASSISTANCE FOR PAID INTERNSHIP IN FINAL YEAR : Emversity provides due assistance for paid internship in the final year at a partner healthcare organization, offering real-world exposure, industry credibility, and a professional head start.
- PLACEMENT ASSISTANCE WITH PARTNER HEALTHCARE NETWORKS : Students receive dedicated support for final placements through our partner hospitals and diagnostic centers, ensuring strong pathways to employment upon graduation.
- **CAREER-READINESS SUPPORT: RESUME TO RECRUITMENT**: Dedicated sessions on job preparedness, resume building, interview skills, and soft skill development help students stand out in competitive hiring environments.
- GLOBAL OPPORTUNITIES AND HIGHER STUDIES PATHWAYS : Graduates are equipped to pursue careers in superspecialty hospitals, research labs, and global healthcare systems, or to advance through postgraduate or certification programs in India and abroad.

# AT AJU'S SCHOOL OF ALLIED HEALTH SCIENCE, YOU DON'T JUST STUDY HEALTHCARE—YOU LIVE IT.

With hands-on learning, real hospital exposure, and Emversity-powered tools at your fingertips, you're prepared to step confidently into the future of patient care and clinical excellence.

#### **BENEFITS FOR ENROLLED CANDIDATES**

Each candidate enrolling for any of the Emversity-empowered program will receive:

- A laptop
- A comprehensive learner's kit, which includes:
  - Bag
  - T-shirt

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Diary

Pen



#### ABOUT 🕫 EMVERSITY

Founded in 2024, Enversity is a Bengaluru-based skill-development powerhouse. It is a leading healthcare education and training platform, committed to bridge the gap between academic learning and industry readiness. Built to bridge the gap between traditional education and workforce demand, it is currently present in 36 campuses across 18 states.

Emversity specializes in industry-integrated, technology-enabled training, especially in healthcare, travel, and hospitality sectors. Unlike traditional degree programs, it blends immersive simulation, virtual reality labs, and employer-designed curriculum with stipend-linked internships and guaranteed placement assistance.

Its healthcare division, in partnership with ARKA JAIN University, offers customized B Sc Hons. degrees resulting in pipeline-ready graduates in allied health fields, ensuring they emerge not just with degrees—but with real-world experience and job readiness from day one.

#### THE EMVERSITY EDGE

- **CAREER GUIDANCE & EXPLORATION** : Workshops and individual consultations to help the student identify career goals within the identified services field as per the chosen program.
- RESUME & INTERVIEW SKILLS WORKSHOPS : Guidance for crafting a compelling resume and cover letter that showcases student's skills and qualifications relevant to the positions as applicable. Mock interviews to hone communication, problem-solving, and critical thinking skills under pressure.
- INDUSTRY CONNECTIONS : Enversity has strong relationships with hospitals, clinics, diagnostic laboratories, quality control centres, research centres and government agencies thus leveraging these connections to connect the students with potential employers.
- JOB PLACEMENT ASSISTANCE : Dedicated placement team actively seeks job opportunities that match the student's skills, career aspirations, and preferred location within the services field along with a curated list of openings and assistance in navigating the application process.





- VISION To empower every individual with the knowledge and skills necessary to respond in life-threatening situations, while promoting awareness and prevention of infectious diseases.
- MISSION- To educate and train people from all walks of life in:
  - 1. CPR and Basic Life Support: Equipping individuals with the skills to respond in cardiac emergencies.
  - 2. Infectious Disease Awareness: Raising awareness about HIV, STIs, dengue, malaria, and other infectious diseases.
  - 3. Health Promotion: Organizing health camps, seminars, and webinars to promote healthy lifestyles and disease prevention.
- AIM We aim to create a community that is informed, equipped, and empowered to take charge of their health and the health of those around them





#### DEPARTMENT OF ANAESTHESIA & OPERATION THEATRE TECHNOLOGY

#### PRECISION. DIAGNOSTICS. DISCOVERY.

The Department of Medical Laboratory Technology, School of Health Allied Science at ARKA JAIN University, in collaboration with Emversity, offers a robust 4-year B. Sc. (Hons.) program in Medical Laboratory Technology (MLT).

This program is designed to develop competent medical technologists skilled in laboratory diagnostics—critical to disease detection, monitoring, and prevention.

Medical laboratory technologists play a pivotal role in healthcare by conducting clinical tests, analyzing samples, and generating data that aid physicians in making accurate medical decisions.

Powered by AJU's partnership with Emversity, students benefit from techenabled learning, modern diagnostic labs, and a paid internship in the final year at a partner healthcare institution.

The curriculum is a dynamic blend of theory, lab-based practice, and hospital exposure—ensuring students are career-ready from day one.

#### B. SC. (HONS.) IN MEDICAL LABORATORY TECHNOLOGY (MLT) -POWERED BY EMVERSITY

#### **ABOUT THE PROGRAM**

The four-year B. Sc. (Hons.) in Medical Laboratory Technology prepares students to become key contributors in healthcare diagnostics.

Through a blend of classroom learning and practical training, students learn to collect and analyze patient samples, perform critical lab tests, and support clinical decision-making with accuracy.

Powered by Emversity, the program offers advanced training in biochemistry, microbiology, hematology, molecular biology, and more.

With a focus on both technical excellence and job readiness, graduates are equipped for careers in hospitals, diagnostic labs, research centers, and public health services, with strong placement support and pathways for further specialization.

The curriculum integrates classroom learning with laboratory training, ensuring graduates are prepared to meet the demands of diagnostic centers, hospitals, and research institutions.





# WHY PURSUE B. SC. (HONS.) IN MEDICAL LABORATORY TECHNOLOGY AT ARKA JAIN UNIVERSITY?

The B. Sc. (Hons.) in Medical Laboratory Technology (MLT) program at ARKA JAIN University is designed to develop future-ready diagnostic professionals equipped with technical precision and analytical thinking.

The program blends research-based learning with hands-on training, preparing students to meet the evolving demands of global healthcare with competence and confidence.

#### **KEY ADVANTAGES:**

- **CRUCIAL ROLE IN PATIENT CARE** : Become an essential part of healthcare delivery through accurate diagnosis and clinical support.
- ADVANCED SKILL DEVELOPMENT : Train with cutting-edge diagnostic equipment and gain exposure to real-world lab practices.
- **HIGH JOB SECURITY** : Enter a growing field with strong demand in hospitals, diagnostic labs, and research facilities.
- **INTERDISCIPLINARY EXPERTISE** : Broaden your career options with in-depth learning across microbiology, biochemistry, hematology, and molecular diagnostics.
- **PATHWAY TO RESEARCH & ACADEMIA** : Build a foundation for higher education, academic roles, or medical research opportunities.

With strong industry integration, internship opportunities, and placement support, the MLT program at AJU is your gateway to a rewarding and impactful healthcare career.

#### **UNIQUE COURSES**

- Healthcare Informatics and Data Analytics
- Medical Ethics & Legal Aspects
- Mental Health & Emotional Intelligence
- Biomedical Waste Management

#### **KEY CAREER ROLES INCLUDE:**

- Medical Laboratory Technologist
- Pathology Technician
- Research Assistant
- Quality Control Specialist

- Medical Documentation and Record Keeping
- Immunopathology & Molecular Biology
- Systematic Bacteriology
- Cytopathology
- Laboratory Manager
- Clinical Biochemist
- Blood Bank Technician

These roles are in high demand across hospitals, diagnostic labs, research institutions, biotech firms, and public health organizations, offering strong job security and growth potential.

#### PLACEMENT SUPPORT NETWORK

Dr. Lal Path Labs, Orange Health Labs, Metropolis, Agilus Diagnostics, Healthians

## **PROGRAM STRUCTURE**

#### **BSC (H) IN MEDICAL LABORATORY TECHNOLOGY**

#### **SEMESTER I**

 Human Anatomy & Physiology

 Biochemistry

 Accounting and Finance

 Communication Skills

 Introduction to Quality and Patient Safety

 Introduction to Computing

 Elementary Biology

#### SEMESTER V

Immunology & Bacterial Serology
Histopathology
Applied Clinical Biochemistry
Clinical Virology
Research Methodology & Biostatistics-I
Summer Internship

#### **SEMESTER II**

Hematology
General Microbiology
Basics of Medical Laboratory Technology
Healthcare Informatics and Data Analytics
Critical Thinking
Environmental Sciences
Routine Tests in Medical Laboratory

#### **SEMESTER III**

Preventive and Social Medicine
Systematic Bacteriology
Applied Hematology
Clinical Pathology
Cultural Diversity in the Indian Society
Medical Documentation and Record Keeping
Medical Ethics & Legal Aspects
Mental Health & Emotional Intelligence

#### **SEMESTER IV**

Biomedical Waste Management	
Applied Bacteriology	
Clinical Mycology	
Diagnostic Biochemistry	
Cytopathology	
Disaster Management	
Campus to Corporate (Bedside Manners & PoSH)	

#### **SEMESTER VI**

Medical Parasitology & Entomology	
Blood Banking & Genetics	
Pathology	
Immunopathology & Molecular Biology	
Research Methodology & Biostatistics-II	

#### **SEMESTER VII**

Research Project Internship

#### **SEMESTER VIII**

Research Project

Internship



#### DEPARTMENT OF ANAESTHESIA & OPERATION THEATRE TECHNOLOGY

#### PRECISION. PREPAREDNESS. PATIENT SAFETY.

The Department of Anaesthesia & Operation Theatre Technology, under the School of Allied Health Science at ARKA JAIN University, offers a dynamic

4-year B. Sc. (Hons.) program in Anaesthesia & Operation Theatre Technology (AOTT) in collaboration with Emversity.

This program is designed to prepare highly skilled professionals who assist in surgical procedures, manage anaesthesia equipment, and ensure operational efficiency and patient safety in Operation Theatres (Ots).

AOTT professionals are integral to surgical teams, assisting anesthesiologists and surgeons in pre-, intra-, and post-operative procedures.

With tech-enabled training, simulation-based learning, and paid internship opportunities in the final year, students are prepared to contribute to critical care settings from day one.

#### B. SC. (HONS.) IN ANAESTHESIA & OPERATION THEATRE TECHNOLOGY (AOTT) -POWERED BY EMVERSITY

#### **ABOUT THE PROGRAM**

This four-year undergraduate degree prepares students for specialized roles in anaesthesia support, OT operations, emergency response, and surgical assistance.

The curriculum integrates anatomy, pharmacology, OT instrumentation, sterilization, anaesthesia techniques, and patient monitoring, with strong emphasis on quality, safety, and critical thinking.

Students learn through a blend of classroom instruction, lab training, and clinical exposure, supported by Emversity's technology-integrated learning ecosystem.

Graduates are equipped for roles in hospitals, trauma centers, surgical units, and critical care departments, with clear pathways for higher studies and specialization.

#### WHY PURSUE B. SC. (HONS.) IN AOTT AT ARKA JAIN UNIVERSITY?

The AOTT program at AJU is crafted to meet the rising demand for skilled OT and anaesthesia technologists in India and abroad.

Through Emversity's industry-aligned curriculum and strong healthcare partnerships, students gain real-world skills that make them workplace-ready.

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#### **KEY ADVANTAGES:**

- VITAL ROLE IN SURGICAL CARE :Support surgeons and anesthesiologists in complex, high-pressure environments.
- ADVANCED EQUIPMENT TRAINING : Get hands-on experience with modern surgical instruments, anaesthesia machines, and monitoring devices.
- HIGH DEMAND & JOB STABILITY : Enter a specialized, in-demand field with job opportunities in both public and private hospitals.
- CROSS-FUNCTIONAL KNOWLEDGE : Learn OT procedures, emergency care, ICU protocols, and anaesthesia support techniques.
- CAREER PROGRESSION & HIGHER EDUCATION : Foundation for roles in hospital operations, OT management, critical care, or postgraduate studies.

#### UNIQUE COURSES

- Introduction to Quality & Patient Safety
- OT Surgical Procedures & Technology
- General Pharmacology & Anaesthesia Drugs
- OT Sterilization and CSSD

- Disaster Management in Surgical Settings
- Advanced Anaesthesia Procedures & Monitoring
- Electronics & Technology in Surgery & Anaesthesia
- Hospital Administration & Clinical Operations

#### **CAREER OPPORTUNITIES AFTER B. SC. (HONS.) IN AOTT**

Graduates are equipped for various high-demand roles in surgical and critical care environments, such as:

- Anaesthesia Technologist
- Operation Theatre Technologist
- Surgical Assistant
- Critical Care Technologist

- ICU/CCU Support Technician
- Emergency & Trauma Support Staff
- Clinical Equipment Operator
- Post-Anaesthesia Care Unit (PACU) Assistant

OT Manager/Coordinator

These roles are highly sought after in multi-specialty hospitals, surgical centers, trauma care units, and military/field hospitals.

#### PLACEMENT SUPPORT NETWORK

Narayana Health, Manipal Hospitals, Fortis Healthcare, Max Healthcare, Medanta – The Medicity, Apollo Hospitals, Aster DM Healthcare



### **PROGRAM STRUCTURE**

#### **B. SC. (H) IN ANAESTHESIA & OPERATION THEATRE TECHNOLOGY**

#### **SEMESTER I**

- Human Anatomy & Physiology
- Biochemistry (Biochemical Metabolism)
- Accounting and Finance
- Communication Skills

Introduction to Quality and patient safety

Introduction to Computing

#### **SEMESTER V**

Advanced and Applied Anaesthesia Procedures
Diagnostic Procedures in OT
Techniques Used in Eye & ENT Surgeries
Perioperative Monitoring and Patient Safety
Research Methodology & Biostatistics-I
Internship Evaluation

#### SEMESTER II

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General Microbiology

Introduction to Surgery and Instrumentation

Healthcare Informatics and Data Analytics

- Critical Thinking
- Environmental Sciences

OT Surgical Procedures

#### **SEMESTER VI**

Anaesthesia and Specialty Surgery
Electronics and technology in surgery and anaesthesia
Hospital Administration
Basic, Advanced Cardiovascular & Trauma Life Support
Research Methodology & Biostatistics-II

#### **SEMESTER VII**

Research Project	
Internship	

#### SEMESTER III

Preventive and Social Medicine
General Pharmacology and Drugs Used in OT
OT Sterilization and CSSD

Introduction to Anaesthesia

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- Cultural Diversity in the Indian Society
- Medical Documentation and Record Keeping
- Medical Ethics & Legal Aspects
- Mental Health & Emotional Intelligence

#### **SEMESTER IV**

Biomedical Waste Management
Elementary Nursing & Critical Care
Basic Intensive Care
Clinical Pathology
Surgical Aspects and Sterilization Techniques
Disaster Management
Campus to Corporate (Bedside Manners & PoSH)

#### SEMESTER VIII

Research Project	
Internship	



#### **DEPARTMENT OF CARDIOVASCULAR TECHNOLOGY**

#### SHAPING TOMORROW'S CARDIAC CARE, TODAY.

The Department of Cardiovascular Technology, under the School of Allied Health Science at ARKA JAIN University, offers a forward-focused 4-year B. Sc. (Hons.) program in Cardiovascular Technology (CVT), in partnership with Emversity.

This program is designed to train allied health professionals who assist in diagnosing and managing heart and vascular conditions using advanced technology and monitoring tools.

CVT professionals are an essential part of cardiac teams, supporting procedures like echocardiography, cardiac catheterization, stress testing, and ECG interpretation.

Students receive tech-enabled education, clinical exposure, and due assistance for paid final-year internship, making them industry-ready upon graduation.

#### B. SC. (HONS.) IN CARDIOVASCULAR TECHNOLOGY (CVT) -POWERED BY EMVERSITY

#### **ABOUT THE PROGRAM**

This four-year undergraduate program equips students with the knowledge and technical expertise to assist cardiologists in evaluating, diagnosing, and treating cardiovascular diseases.

The curriculum blends foundational sciences with specialized training in electrocardiography, echocardiography, invasive cardiology, and cardiac monitoring.

Through Emversity's integrated platform, students engage in interactive learning, lab simulations, and hospital-based internships to master both technical procedures and patient interaction protocols. Graduates are equipped for careers in cardiology departments, cath labs, ICUs, and diagnostic centers.

# WHY PURSUE B. SC. (HONS.) IN CVT AT ARKA JAIN UNIVERSITY?

The CVT program at AJU is ideal for students looking to build a high-impact career in cardiovascular care. With Emversity's industry-aligned approach and immersive clinical training, the program ensures students graduate with both confidence and competence.



#### **KEY ADVANTAGES:**

- CORE ROLE IN CARDIAC CARE : Assist in the diagnosis and treatment of cardiovascular diseases alongside cardiologists.
- TRAINING ON MODERN CARDIAC EQUIPMENT : Learn ECG, echo, and cath lab operations using advanced monitoring and diagnostic tools.
- HIGH EMPLOYABILITY IN CARDIAC SPECIALTIES : Serve in hospitals, cath labs, cardiac rehab centers, and diagnostic chains.
- INTEGRATED LEARNING & CLINICAL EXPOSURE : Balance theory with real-time hospital training, research exposure, and hands-on skill labs.
- FOUNDATION FOR HIGHER STUDIES : Strong base for pursuing postgraduate education or specializations in cardiology tech, perfusion, or hospital administration.

#### **UNIQUE COURSES**

- Basic & Advanced Electrocardiography (ECG)
- Basic Echocardiography & Cardiovascular Diseases
- Cardiac Catheterization Techniques
- Perfusion Technology & Pediatric Interventions
- NALS & PALS
- Invasive Cardiology & Stress Testing
- Healthcare Informatics & Data Analytics
- Medical Ethics, Mental Health & Emotional Intelligence

#### **CAREER OPPORTUNITIES AFTER B. SC. (HONS.) IN CVT**

Graduates can pursue dynamic roles in cardiovascular care, diagnostics, and clinical operations, including:

- Cardiovascular Technologist
- ECG/Echo Technician
- Cath Lab Technician
- Cardiac Rehabilitation Assistant

- Cardiac ICU/CCU Technologist
- Cardiopulmonary Technician
- Clinical Research Assistant Cardiology
- Cardiovascular Equipment Operator

Stress Test Technician

Opportunities exist in multi-specialty hospitals, cardiac centers, diagnostic labs, rehabilitation clinics, and research facilities.

#### PLACEMENT SUPPORT NETWORK

Narayana Health, Manipal Hospitals, Fortis Healthcare, Max Healthcare, Medanta – The Medicity, Apollo Hospitals, Aster DM Healthcare



#### **PROGRAM STRUCTURE** B. SC. (H) IN CARDIOVASCULAR TECHNOLOGY

#### **SEMESTER I**

**SEMESTER II** 

Applied Anatomy, Physiology, pharmacology in

Healthcare Informatics and Data Analytics

- Human Anatomy & Physiology
- Biochemistry (Biochemical Metabolism)
- Accounting and Finance
- Communication Skills

Introduction to Quality and patient safety

Introduction to Computing

General Microbiology

**Environmental Sciences** 

Cardiac Care

Basic Electrocardiography (ECG)

#### SEMESTER V

Cardiac Catheterization	
Pediatric Interventions	
ACLS	
Treadmill exercise stress testing & 24 hours recordin	g
Research Methodology & Biostatistics-I	
Internship Evaluation	

#### **SEMESTER VI**

Perfusion Technology Principles of Ultrasonography NALS & PALS Hospital Operation Management Research Methodology & Biostatistics-II

#### **SEMESTER VII**

Internship - I

#### **SEMESTER III**

Basic Life Support, Vital Signs, Basic ECG Interpretation

Preventive and Social Medicine
Basic Echocardiography
Medical Instrumentation relevant to Cardiac care
Cardiovascular diseases pertinent to Cardiac care Technology
Cultural Diversity in the Indian Society
Medical Documentation and Record Keeping
Mental Health & Emotional Intelligence

#### **SEMESTER IV**

Development of Cardiovascular system : Fetal & Neonatal
Advanced Electrocardiography
Advanced Echocardiography
Invasive Cardiology
Disaster Management
Medical Ethics & Legal Aspects
Campus to Corporate (Bedside Manners & PoSH)

#### **SEMESTER VIII**

Internship - II

**Research Project** 



#### **DEPARTMENT OF RESPIRATORY TECHNOLOGY**

#### **BREATHING LIFE INTO CRITICAL CARE**

The Department of Respiratory Technology at the School of Allied Health Science, ARKA JAIN University, offers a future-ready 4-year B. Sc. (Hons.) program in Respiratory Technology (RT) in collaboration with Emversity.

This program is designed to train healthcare professionals who support physicians and pulmonologists in diagnosing, treating, and managing patients with respiratory and cardiopulmonary disorders.

Respiratory technologists play a vital role in ICUs, emergency care, and pulmonary clinics, handling ventilators, oxygen therapy, and pulmonary function testing.

Students benefit from tech-integrated education, real-time hospital exposure, and a paid internship in the final year—ensuring seamless transition from campus to clinical care.

#### B. SC. (HONS.) IN RESPIRATORY TECHNOLOGY -POWERED BY EMVERSITY

#### **ABOUT THE PROGRAM**

This four-year undergraduate degree prepares students to work as specialized technologists in respiratory and pulmonary care units.

The curriculum provides in-depth learning in respiratory anatomy, pulmonary disorders, oxygen therapy, mechanical ventilation, pulmonary rehabilitation, and emergency airway management.

Through a perfect blend of classroom instruction, lab training, and hospital internships, the program enables students to work confidently in ICUs, trauma centers, emergency departments, and specialized respiratory care units.

The Emversity advantage provides access to healthcare tech tools, simulation training, and soft skill development, empowering students to become highly employable respiratory care professionals.

#### WHY PURSUE B. SC. (HONS.) IN RESPIRATORY TECHNOLOGY AT ARKA JAIN UNIVERSITY?

The RT program at AJU is ideal for students seeking a career in life-saving critical care. With Emversity's immersive industry-driven curriculum and strong healthcare partnerships, students graduate with the expertise and confidence needed to thrive in respiratory support roles.





#### **KEY ADVANTAGES:**

- **CRITICAL ROLE IN PULMONARY CARE** : Assist doctors in managing patients with respiratory conditions, including COPD, asthma, and trauma-induced lung dysfunction.
- VENTILATOR & LIFE SUPPORT TRAINING : Operate and monitor life-saving equipment such as ventilators, oxygen delivery systems, and nebulizers.
- DIVERSE CLINICAL EXPOSURE : Get trained across ICUs, emergency departments, rehabilitation centers, and community health facilities.
- HIGH INDUSTRY DEMAND : Enter a rapidly growing field with global demand in hospitals, critical care units, and home healthcare services.
- PLATFORM FOR FURTHER SPECIALIZATION : Strong foundation to pursue advanced studies or certifications in pulmonary diagnostics, critical care, or cardiopulmonary therapy.

#### **UNIQUE COURSES**

- Respiratory Therapy Basic, Applied & Advanced
- Chest Physiotherapy & Pulmonary Rehabilitation
- Ventilator Management & Oxygen Therapy
- Pulmonary Function Testing

- Health Psychology & Mental Well-being
- Healthcare Informatics & Data Analytics
- Hospital Administration & Community Health
- Disaster Management in Respiratory Emergencies

# CAREER OPPORTUNITIES AFTER B. SC. (HONS.) IN RESPIRATORY TECHNOLOGY

Graduates of the RT program can pursue careers in both clinical and critical care roles, including:

- Respiratory Therapist
- Ventilator Technician
- ICU Respiratory Care Technologist
- Pulmonary Rehabilitation Specialist

- Sleep Lab Technician
- Home Care Respiratory Therapist
- Pulmonary Function Testing (PFT) Technician
- Clinical Educator in Respiratory Therapy

Emergency Airway Support Technician

Opportunities are available in multi-specialty hospitals, ICUs, emergency departments, rehabilitation centers, and critical care transport teams.

#### PLACEMENT SUPPORT NETWORK

Narayana Health, Manipal Hospitals, Fortis Healthcare, Max Healthcare, Medanta – The Medicity, Apollo Hospitals, Aster DM Healthcare



## **PROGRAM STRUCTURE**

#### **B. SC. (H) IN RESPIRATORY TECHNOLOGY**

#### **SEMESTER I**

- Human Anatomy & Physiology I
- Biochemistry
- **Basics of Computers**
- English & Communication Skills
- Introduction to Quality and patient safety

#### **SEMESTER II**

#### Human Anatomy & Physiology II Microbiology & Pathology Health Psychology

**Critical Thinking** 

Introduction to Respiratory Therapy

#### **SEMESTER III**

Accounting & Finance	
Respiratory Therapy – Basic	
Basics of Medical Disorders	
Basic Respiratory Therapeutics & Monit	oring
Pharmacology	
Environmental Studies	

#### **SEMESTER IV**

Chest Physical Therapy and Pulmonary Rehabilitation
Respiratory Therapy- Clinical I
Community Health
Respiratory Therapy - Applied I
Medical Ethics & Legal Aspects
Healthcare Informatics and Data Analytics

#### **SEMESTER V**

Basic Intensive Care (BLS&ACLS)
Respiratory Therapy- Clinical II
Respiratory Therapy - Applied II
Respiratory Therapy – Advanced
Research Methodology & Biostatistics

#### **SEMESTER VI**

Disaster Management
Pulmonary Function Testing
Ventilator Management
Hospital Administration
Campus to Corporate (Bedside Manners) Mental Health and Emotional Intelligence

#### **SEMESTER VII**

Internship - I

#### **SEMESTER VIII**

Internship - II

**Research Project** 



# VALUE ADDED COURSES - VIA



- LinkedIn Learning offers a world of opportunities for young and aspiring professionals, empowering them to acquire new skills and excel in their careers. Through a strategic partnership with LinkedIn, the JAIN Group of Institutions provides students access to a cutting-edge learning platform.
- With over 23,000 courses curated and delivered by industry experts, LinkedIn Learning equips you with the skills and competencies that are highly valued by enterprises. From language and literature to advanced professional skills, the courses are designed to pave a seamless path for your professional growth.

The flexible online format enables you to learn at your own pace, whether at home or on campus. Each course concludes

 with competency mapping to assess your learning and awards you a globally recognized certificate, enhancing your career prospects significantly.

## FEW OF THE PROMINENT COURSES ARE DETAILED BELOW, TO GIVE YOU A BIRD'S EYE VIEW OF THE ENTIRE SPECTRUM OF COURSES:

- Business English
- Certification Microsoft Excel Basic to Advance
- Social Media Marketing foundation
- Accounting Foundations: Managerial Accounting
- Business Analytics Marketing
- Data Project Management
- Foundation Excel
- Essential Training
- Digital Marketing
- Foundation Google
- University Analytics
- Creating A Business Plan
- Speaking Confidently and effectively
- Business Analysis
- Foundation Leadership Foundation
- Learning Python
- Photography Foundations: Mobile Photography

- iPhone Photography: Shooting to Storytelling
- WordPress Essential Training
- Develop Your Finance and Accounting Skills
- Financial Accounting Foundations
- Entrepreneurship Foundation

# Linked in LEARNING

#### EARN GLOBALLY RELEVANT CERTIFICATIONS

ADVANCE YOUR CAREER WITH COURSES RECOGNIZED AND VALUED BY THE INDUSTRY.

# VALUE ADDED COURSES - MA

# **coursera** for campus

- Coursera is a renowned global online learning platform that provides access to a wide range of courses and degree programs from top universities and companies worldwide. Its highly sought-after e-certificates require a significant investment, reflecting their value and credibility in the industry.
- With partnerships spanning over 250 leading organizations and academic institutions, Coursera delivers flexible, jobfocused online learning to individuals and organizations globally. The platform features a diverse catalog of nearly 12,000 content offerings, available in various formats and lengths, tailored to meet evolving market demands and skill requirements.
- Coursera's content is categorized into four primary learning types, designed to suit different learning needs and objectives:
- Guided Projects (3,300+) Hands-on learning (30-60 mins) for real-world skills and tools
- Courses (8,100+) Develop new skills by learning from a leading institution (university or industry partner) (3-4 weeks)
- Specializations (750+) Build mastery of a skill via structured pathway (also known as a micro-credential), offered by universities or industry partners (typically 4-5 courses, or 8-12 weeks)
- Professional Certificates (140+) Get job-ready for an in-demand career in less than a year through an industry microcredential (typically 6-9 months). Many programs also provide a pathway to an industry-recognized certification.
- In addition, there are Clips (290,000+) Bite-sized content (5-10 mins), sourced from the courses, for just-in-time learning.

#### FEW OF THE PROMINENT COURSES ARE DETAILED BELOW TO GIVE YOU A BIRD'S EYE VIEW OF THE ENTIRE SPECTRUM OF COURSES

- Google Al Essentials
- IBM Data Science
- Python for everyone
- Strategic Leadership and Management
- Al for everyone
- Advanced data analytics
- Corporate communication
- Successful Interviewing
- Deep Learning
- Machine Learning
- Creating presentations via Canva
- Finding your professional voice: Confidence & Impact
- From Excel to Power BI
- Computer communication

- Creative thinking: Techniques and tolls for success
- Business English Communication Skills
- Successful presentations

#### WITH COURSERA FOR CAMPUS, YOU CAN:

- Earn Globally Relevant Certifications
- Map Certifications with your degree at AJU
- Map with your subjects of the program and replace the classroom study with anytime study with Coursera for Campus
- Elevate your career with industry recognized courses

# **CLUBS, UNIT TRES, SOC** COMMITTEES, CEN BRA STUDENT CHAPTER

#### 1. CENTRES





#### 2.COMMITTEES

INTERNAL COMPLAINTS COMMITTEE

#### 3. CELLS

- INTERNAL QUALITY ASSURANCE CELL
- DISCIPLINE & ANTI RAGGING CELL
- STUDENT GRIEVANCE REDRESSAL CELL
- EQUAL OPPORTUNITY CELL
- ADMISSION FACILITATION CELL
- INDUSTRY INSTITUTE INTERACTION CELL
- TRAINING & PLACEMENT CELL

#### 4.COUNCILS





# 5. SOCIETIES

4





#### **6.UNITS**







#### RESEARCH AND DEVELOPMENT CELL

 AJU NYAY SAMARTHAN CELL – LEGAL AID & AWARENESS CELL (SCHOOL OF LAW)



7.CLUBS



#### **8.STUDENT CHAPTERS/ BRANCHES**









# **ADMISSION PROCESS**

#### **OFFLINE MODE**

- Collect the Application Form and prospectus In-person by paying Rs. 1000/- (General Category) or Rs. 500/- (SC/ST Category) at the
- Admission Office Address: D-28, Danish Arcade, Opp. Asian Inn Hotel, Dhatkidih, Jamshedpur, Jharkhand, Pin 831001 or University campus situated at Opposite to Kerala Public School, Mohanpur, Gamharia, Dist.- Seraikela Kharsawan, Jharkhand, Pin 832108
- Phone- 0657 2220285 or Toll-free No.- 7371037371
- Submit the duly filled form along with the fees

#### **ONLINE MODE**

- Fill online form on our website www.arkajainuniversity.ac.in and Pay (General Category: Rs. 1000/-) & (SC/ST Category: Rs. 500/-) online.
- Download the duly filled application form and visit our admission office or university campus at the earliest.
- Once your documents are verified by University Admission Officer, pay the first Installment of the fees

## **CONTACT DETAILS:**

- 6 Landline Number: 0657-2220285
- 🔇 Toll Free Number: 7371037371
- 🕓 Whatsapp Number: 8406800562



- Email: admission@arkajainuniversity.ac.in
- Admission Office: D-28, Danish Arcade, Opposite Asian Inn Hotel, Dhatkidih, Jamshedpur - 831001

Campus Address: Opposite Kerala Public School, Village - Mohanpur , Block - Gamharia, District - Seraikela Kharsawan, Jharkhand - 832108







