



GAYATRI VIDYA PARISHAD INSTITUTE OF HIGHER LEARNING AND RESEARCH

*(Deemed to be University under Distinct Category
under Section 3 of the UGC Act, 1956)*

Kommadi, Madhurawada, Visakhapatnam - 530 048, Andhra Pradesh

School of Sciences

(GVPIHLR-SOUTH EAST CAMPUS, RUSHIKONDA)

B.Sc. (Hons) Statistics and Quantitative Methods

A Four-Year Undergraduate Honors / Five - Year Integrated Program
with multiple entry and exit option



VISION

GVPIHLR envisions 'Creating Human Excellence for a better society through holistic and multidisciplinary education.'



MISSION

At GVPIHLR, our mission is propelled by an unwavering dedication to achieving human excellence and contributing to a better society through a holistic and multidisciplinary approach to education".

CONTACT DETAILS



Dr Pasala Srinivasa Rao



Mobile : +91-8247513987



Email : drpsr.gvpihlr@gmail.com



Website : www.gvpihlr.in/



Dr P Raju



Mobile : +91-8106165595



Email : drpr.gvpihlr@gmail.com



Website : www.gvpihlr.in/

● ABOUT GVPIHLR

Gayatri Vidya Parishad is a non-profit organization established with a service motive, committed to develop education in India, registered (No.510/1988, Visakhapatnam District, Andhra Pradesh) as an educational society under section-21 of Society's Act on September 28th, 1988 with the stated aim "To promote, establish, maintain and assist or aid in maintaining educational and other institutions with a view to impart education in all branches in general and in Advanced Technology, Management, Education and Science (including Healthcare) in particular and thus to facilitate securing gainful employment for the youth of the country."

GVP has been inculcating the blend of ancient wisdom and traditional values with modern science and technology for the health and well-being of the society among the youth.

Gayatri Vidya Parishad Institute of Higher Learning and Research (GVPIHLR), a deemed to be university under distinct category offering both UG and PG programs with the integration of Multidisciplinary, Interdisciplinary and Transdisciplinary fields.

● SCHOOLS UNDER GVPIHLR

- School of Arts and Humanities
- School of Chemical, Mechanical and Civil Engg.
- School of Electrical and Electronics Engg.
- School of Management Studies
- School of Computer Science and Engg.
- School of Sciences



● PROGRAMS UNDER SCHOOL OF SCIENCES

AICTE – 4 YEAR UNDERGRADUATE HONORS PROGRAM

- BCA (Hons)-Bachelor of Computer Applications

UG 4 YEAR HONORS PROGRAM / 5 YEAR INTEGRATED PROGRAM

- B.Sc. (Hons) Computer Science and Artificial Intelligence
- B.Sc. (Hons) Embedded Electronics and Artificial Intelligence
- B.Sc. (Hons) Quantum Computing and Artificial Intelligence
- B.Sc. (Hons) Bioinformatics with Artificial Intelligence
- B.Sc. (Hons) Statistics and Data Science
- B.Sc. (Hons) Mathematics and Computer Science
- B.Sc. (Hons) Statistics and Quantitative Methods
- B.Sc. (Hons) Chemistry and Pharmaceutical Applications

POSTGRADUATE PROGRAMS UNDER SCHOOL OF SCIENCES:

AICTE – TWO YEAR POSTGRADUATE PROGRAM

- MCA –Master of Computer Applications

TWO-YEAR POSTGRADUATE PROGRAMS

- M.Sc. (CS & AI) –Master of Science in Computer Science and Artificial Intelligence
- M.Sc. (OC-DD) Master of Science in Organic Chemistry with Drug Design



● B.Sc. (Hons) Statistics and Quantitative Methods



- **Rooted in the Vision of Equality:** The programme reflects the belief that true education and wisdom foster equality, knowledge, and respect for all beings. This 5 Year Integrated /4-Year Undergraduate Honors Programme for intellectually curious young minds.



- **Numbers that Explain the Real World:** Designed for students who enjoy numbers, patterns, puzzles and logical thinking, the programme develops the ability to understand how data, figures and mathematical models explain real-world phenomena—from market prices to economic growth.



- **An Integrated Quantitative Programme:** The programme brings together Statistics – the science of data; Econometrics – the science of testing economic ideas with data; and Mathematical Economics – the science of building economic models using mathematics.



- **Modern, Practical and Career-Oriented:** Students learn to interpret data intelligently, question evidence critically, and solve real-world problems, gaining a strong interdisciplinary foundation for higher studies and diverse career opportunities.

PROGRAMME OBJECTIVES

- To build a strong foundation in probability, statistical theory and mathematical methods.
- To train students in econometric modelling and testing of economic theories using real data.
- To develop practical skill in statistical and programming software (MS-Excel, SPSS, Stata, R, Python, Jamovi and other Software tools).
- To encourage research temperament through internships, projects, field surveys and dissertations.
- To connect classroom learning with industry, public and policy-making bodies through internships.



WHY B.Sc. (Hons) STATISTICS AND QUANTITATIVE METHODS

- A Rigorous Foundation in Data Analysis
- Applied Training in Statistical and Computational Tools
- Mathematical Grounding in Economic Theory
- Interdisciplinary Career Pathways
- Preparation for Advanced Study and Competitive Examinations



PROGRAMME COMPONENTS

- Discipline Specific Core
- Multidisciplinary Courses
- Discipline Specific Electives
- Value Added Courses
- Skill Enhancement Courses
- Social Immersion Projects
- Ability Enhancement Courses
- Internships / Academic Projects



CORE LEARNING AREAS / CORE SKILLS:

DISCIPLINE SPECIFIC CORE	DISCIPLINE SPECIFIC CORE
Descriptive Statistics	Fundamentals of Micro and Macro Economics
Mathematical Expectation and Probability Distributions	Mathematical Methods for Economics
Introduction to Computers and Office Applications	Introduction to Artificial Intelligence
Statistical Methods and Inferential Statistics	Indian Economy: Structure and Development
Python Programming	Differential and Difference Equations
Sampling Techniques and Design of Experiments	Econometric Methods
Operations Research	Development Economics
Multivariate Techniques	International Economics
Research Methodology	Applied Econometrics

DISCIPLINE SPECIFIC ELECTIVES

STATISTICS	QUANTITATIVE METHODS
Computational Statistics with MS Excel	Public Economics
Computational Statistics with SPSS	Money and Banking
Data Analytics using R	Financial Econometrics
Data Analytics using Python	Time Series Econometrics
Optimization Techniques	Agricultural Economics
Stochastic Process	Industrial Economics
Quality Control and Reliability	Economics of Health

B.Sc (Hons)

Statistics and Quantitative Methods



CORE SKILLS

- Statistical Modelling
- Econometric Modelling
- Machine Learning Models
- AI enabling data analytics



MODERN TOOLS & COMPUTATIONAL EXPOSURE

- Python
- SPSS
- R
- Jamovi
- Spreadsheet



LEARNING BEYOND THE CLASSROOM

- NCC (Army Wing)
- NCC (Air Wing)
- NSS / Yoga
- Workshops
- Internships / Projects
- Laboratory Training



CAREER PATHWAYS



Technology & Analytics companies
(DATA SCIENTIST / ANALYST)



Financial institutions
(QUANTITATIVE ANALYST)



Think tanks & research institutions
(RESEARCH ANALYST)



International organizations
(ECONOMIC ANALYST)



Government agencies
(ECONOMIST / STATISTICIAN)



Private sector
(DATA ANALYST / SCIENTIST)



Academia
(TEACHING / RESEARCH)



GVP PAST RECRUITERS

- TCS
- Infosys
- Wipro
- Capgemini
- Deloitte
- Amazon
- L & T
- Genpact



ROLES OF DISTINGUISHED GVP ALUMNI

- Data Analysts
- Application Specialists
- Graduate Engineer Trainees
- Banking Infrastructure Service Analysts
- AI & Data Engineer
- Consultant in Computer Systems Validation



ELIGIBILITY

Successful completion of Higher Secondary (10+2) or equivalent with Mathematics from a recognized board with a minimum of 50% aggregate marks.

