



भारतीय प्रौद्योगिकी
संस्थान जम्मू
INDIAN INSTITUTE OF
TECHNOLOGY JAMMU



DEPARTMENT OF
HSS
HUMANITIES &
SOCIAL SCIENCES

BACHELOR OF SCIENCE IN **BEHAVIORAL SCIENCES** & **PREDICTIVE ANALYTICS** 2026 - 2027



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Overview of the

BS PROGRAM

Bachelor of Science (BS) in Behavioral Sciences and Predictive Analytics (BSPA)

The Bachelor of Science in Behavioral Sciences and Predictive Analytics (BSPA) is inherently interdisciplinary, merging two distinct but complementary fields: behavioral sciences and predictive analytics. The program integrates the study of human behavior with advanced data analysis techniques, providing students with a holistic understanding of both qualitative and quantitative dimensions of human actions and decisions. This unique combination addresses the need for professionals who can interpret human behavior using data-driven approaches, making it relevant across various sectors such as healthcare, public policy, marketing, and social sciences.

The program's interdisciplinary nature equips students with the tools to analyze complex social issues using behavioral insights and predictive models. The dual focus on theoretical understanding and practical application enables students to bridge the gap between humanities and data science, preparing them for a wide range of careers where both critical thinking and technical expertise are essential.

In summary, BSBSPA's curriculum draws from multiple academic disciplines, ensuring that graduates are well-rounded professionals capable of addressing complex societal challenges through innovative, interdisciplinary methods.

Interdisciplinary Integration

The establishment of an undergraduate program in behavioral sciences and predictive analytics by the humanities and social science department represents a forward-thinking approach to education that aligns with contemporary academic and professional landscapes. This program seamlessly combines the study of human behavior with advanced analytical techniques, offering a unique interdisciplinary education that is essential in today's data-driven world.

Addressing Complex Social Issues

By integrating behavioral sciences with predictive analytics, this program equips students with the skills to understand and predict human behavior in various contexts. This is crucial for addressing complex social issues such as mental health, social inequality, consumer behavior, and public policy. Graduates will be capable of designing data-informed interventions and policies that can profoundly impact society.

Enhancing Research and Practical Application

The program encourages both theoretical understanding and practical application. Students will engage in rigorous research methodologies and learn to apply predictive models to real-world scenarios. This dual focus prepares graduates to contribute to academic research and to provide actionable insights in practical settings, bridging the gap between theory and practice.



Who we are?

IIT Jammu, established in 2016, has navigated a remarkable journey from Paloura to Jagti, overcoming significant challenges. Our progress can be distilled into a single word: "unwavering." Like a tree that grows stronger with time, our institute has advanced with determination, driven by our faculty's pursuit of innovation and excellence. Located on a sprawling 400-acre permanent campus in Jagti, Nagrota, the institute offers several B.Tech, M.Tech, MS, and PhD programs with addition of new courses in 2026–BTech in Engineering Physics and Bachelors in Behavioral Science and Predictive Analytics.

We've forged substantial international collaborations with esteemed institutions, including National Chung Cheng University, the University of Bergen, and the University of Alabama, among others. Our faculty has consistently attracted prestigious research investments, contributing to our expanding research landscape. Notably, 14 faculty members are supported under the SAP program, and eight under the SIRE program.

Our research endeavors have yielded impressive results. The Biosciences and Bioengineering Department secured Rs. 1.67 crore in grants, paving the way for a Bio-Interface Technology Master's program. We've also seen significant growth in externally funded projects, with 74 projects worth nearly Rs. 20 crore added last year, bringing our total to 194 projects. Furthermore, we've collaborated on 84 consultancies, with a sanctioned amount exceeding Rs. 5 crore.

Our Central Instrumentation Facility (CIF), or Saptarishi, has become a hub for pioneering research, with seven state-of-the-art labs. The Lithography and Fabrication lab is operational, and the Raman Spectroscopy equipment is actively used in the Spectroscopy lab.

Building on this momentum, in 2024, we continued to improve our NIRF ranking in the Engineering Category. Our research and consultancy efforts have yielded remarkable results, with 103 sanctioned research projects between April 2023 and September 2024, totaling over Rs. 50 crore. We're proud to lead a consortia-based mechanism for the Central Project Management Unit for AI, funded by the Ministry of Education with a financial outlay of around Rs. 1000 crore. Our students have also excelled, with 70.8% of the batch of 2024 securing coveted campus offers despite the industry recession era.

Through these achievements, IIT Jammu reaffirms its commitment to innovation, research, and student success. With a growing reputation in innovation, startups, and social impact projects in J&K, IIT Jammu is cementing its place among India's leading engineering institutions.

Message from

Department of Humanities and Social Sciences

It gives us great pleasure to introduce the Bachelor of Science in Behavioral Sciences and Predictive Analytics, an innovative undergraduate program crafted by the Department of Humanities and Social Sciences at IIT Jammu.

This program brings together core ideas from psychology, cognitive science, behavioral economics, and sociology, and integrates them with statistical reasoning, data science, and predictive modelling. Our goal is to help students understand human behavior not just at the level of individual experience, but also as complex, measurable patterns that unfold across social systems and environments. This interdisciplinary program is designed to bridge the understanding of human behavior with data-driven decision-making.

By integrating insights from behavioral sciences, psychology, sociology, and economics with tools from statistics, data analysis, and computational modelling, students will be uniquely equipped to decode complex human patterns and contribute to solutions in domains ranging from mental health and education to policy, design, and technology.

At the Department of Humanities and Social Science, we are committed to fostering analytical thinkers and socially conscious individuals. This program is a reflection of our vision—to prepare students who are not only adept in behavioral theory but also skilled in the application of predictive tools to address real-world challenges.

We invite curious minds to embark on this exciting academic journey and become a part of a future-ready generation of behavioral scientists and analysts.

Warm regards,
Department of Humanities and Social Science





HIGHLIGHTS OF THE

BS PROGRAM

BS in Behavioral Sciences and Predictive Analytics

with Honours in Psychology | Sociology | Economics

1. What is BSPA?

The Bachelor of Science in Behavioral Sciences and Predictive Analytics (BSPA) is a pioneering 4-year undergraduate programme offered by the Department of Humanities & Social Sciences at IIT Jammu. It sits at the confluence of human behaviour, data science, and technology — preparing graduates who can both understand why people think and act as they do, and deploy computational tools to predict and influence those behaviours at scale.

Unlike conventional social science degrees, BSPA is built for the age of AI and big data. Students graduate with the analytical rigour of an IIT education combined with deep expertise in psychology, sociology, and economics.

2. What Makes BSPA Distinctive?

Interdisciplinary by Design

BSPA does not treat the social sciences and computing as separate worlds. Every semester weaves together courses from Behavioral science, mathematics, statistics, computer science, and humanistic inquiry — producing graduates who speak fluently across disciplines.

Real-World Orientation

The curriculum is structured so that learning progressively moves from foundational concepts toward applied, real-world competencies — culminating in a mandatory internship and a capstone Honours project.

The Only Programme of Its Kind at an IIT

By integrating behavioral sciences with predictive analytics, this program equips students with the skills to understand and predict human behavior in various contexts. This is crucial for addressing complex social issues such as mental health, social inequality, consumer behavior, and public policy. Graduates will be capable of designing data-informed interventions and policies that can profoundly impact society.

3. Programme Highlights at a Glance

- 156.5 credits across 8 semesters — a comprehensive, credit-rich programme
- Four flexible exit points with recognised credentials:
 1. Certificate in BSPA — after Semester 2
 2. Diploma in BSPA — after Semester 4
 3. BS Degree in BSPA — after Semester 6
 4. BS with Honours in BSPA — after Semester 8
- Mandatory Semester 7 internship (3–6 months) with industry, NGOs, or centrally funded research institutions (IITs, IISc, IISERs, Central Universities)
- Honours tracks in three domains — Psychology, Sociology, or Economics — declared at the end of Semester 4

- Two Honours routes offering choice between coursework and research:
 - 1.Route A (Course Route): 4 PhD-level courses in the chosen Honours domain
 - 2.Route B (Research Route): Independent dissertation / thesis under faculty supervision
- No minimum CGPA bar for the Semester 7 internship – open to all students
- Courses co-taught by IIT Jammu HSS faculty alongside specialists from Computer Science and Mathematics

4. Curriculum Structure

The programme is built around five course categories that ensure both disciplinary depth and broad intellectual formation:

Category	Full Form	Credits	Share
IC	Institutional Core	61.5	39.27%
DC	Department Core	51.0	32.57%
DE	Department Elective	21.0	13.40%
OE	Open Elective	15.0	9.58%
CEC	Co-curricular & Enrichment	8.0	5.10%
TOTAL		156.5	100%

5. The Learning Journey – Semester by Semester

Years 1 & 2 – Foundation

Students build core competencies across four pillars: the biological and cognitive bases of behaviour (Neuroscience, Cognitive Psychology), quantitative tools (Calculus, Linear Algebra, Statistics), computational thinking (Programming, DBMS, Machine Learning), and humanistic inquiry (Introduction to Psychology, Humanities, Economics). Co-curricular courses ensure holistic development.

Years 3 & 4 – Depth & Application

Students move into specialisation – Predictive Analytics, Human-Computer Interaction, Philosophy of AI, Data Privacy, and Ethics in Behavioral Science. Open Electives allow cross-disciplinary exploration. The Semester 7 internship provides professional immersion. Semester 8 delivers capstone learning through Public Policy, Business Strategy, and the Honours pathway.

6. Honours – Going Deeper

Students who complete all 8 semesters earn the degree with Honours in their chosen domain. The Honours declaration is made at the end of Semester 4, giving students time to explore before committing.

Route A — Course Route

Complete 4 out of 6 PhD-level courses offered in the chosen Honours domain (Psychology / Sociology / Economics). Ideal for students seeking broad advanced knowledge and preparation for postgraduate coursework.

Route B — Research Route

Conduct an independent research project under a faculty supervisor, culminating in a dissertation or thesis submitted before the end of Semester 8. Requires a minimum of 2 Open Electives in the chosen Honours domain. Ideal for students planning research careers or PhD programmes.

7. Semester 7 Internship

A defining feature of BSPA is the full-semester internship in Semester 7. Students spend 3 to 6 months embedded in a host organisation — gaining first-hand experience of how Behavioral insights and data analytics operate in real settings.

- Host organisations: Industry companies, NGOs, and centrally funded research institutions (IITs, IISc, IISERs, Central Universities)
- No minimum CGPA requirement — the internship is open to all BSPA students
- Each student is supported by two mentors: an IIT Jammu faculty mentor (from HSS) and a host organisation mentor
- Assessment via viva voce (20 November – 1 December), evaluated by a panel of the IIT Mentor, Host Mentor, and an invited HSS member

8. Career Pathways

BSPA graduates are equipped for a wide range of careers at the intersection of human behaviour and data-driven decision-making:

Industry & Practice

- UX / Behavioral Researcher
- Data Analyst & Business Intelligence Specialist
- Policy Analyst / Public Affairs Consultant
- AI Ethics & Human–AI Interaction Specialist
- Market Research & Consumer Insights Analyst
- HR Analytics & Organisational Behaviour Consultant
- Health Behaviour & Social Impact Consultant

Academia & Research

- Postgraduate studies — MS, MA, MBA, or PhD
- Cognitive / Social Scientist
- Computational Social Science Researcher
- Behavioral Economist
- Public Health & Development Researcher
- Science Policy Advisor
- Think-tank & Independent Research Fellow



Core Training in Year 1 and Year 2

- Strong Foundation with core courses in Behavioral Sciences, Neurosciences, Social Sciences, Humanities, Economics, Mathematics, Computer Programming, Data Science, Machine Learning, Psychology & Cognitive Sciences.

Advanced Learning in Year 3 and Year 4

- Advanced and specialisation courses in Data Science, Machine Learning, Behavioral Sciences, Business Strategy, Psychology, Economics, Humanities & Social Science, and Policy Making
- Projects
- Semester-long industry experience
- Basket of elective courses across the curriculum of IIT Jammu

Option of multiple exits during the program as per NEP-2020

01



EXIT 1: CERTIFICATE IN BEHAVIORAL SCIENCES AND PREDICTIVE ANALYTICS

After the successful completion of one year of the program

02



EXIT 2: DIPLOMA IN BEHAVIORAL SCIENCES AND PREDICTIVE ANALYTICS

After the successful completion of two years of the program

03



EXIT 3: BACHELOR OF SCIENCE IN BEHAVIORAL SCIENCES AND PREDICTIVE ANALYTICS

After the successful completion of three years of the program

04



EXIT 4: BACHELOR OF SCIENCE IN BEHAVIORAL SCIENCES AND PREDICTIVE ANALYTICS WITH HONORS IN PSYCHOLOGY/SOCIOLOGY/ECONOMICS

After the successful completion of four years of the program

Credits Requirement: A minimum of 154 credits, which are distributed across eight semesters, needs to be fulfilled for graduating with honors.



CAREER PROSPECTS

Graduates of the BSBSPA program are well-equipped for diverse career opportunities that blend human behavioral understanding with advanced data analysis. With expertise in both fields, they are uniquely positioned for roles across multiple industries, where data-driven decision-making and behavioral insights are increasingly crucial.

The combination of behavioral theory and predictive analytics ensures that BSBSPA graduates have a broad skill set, making them versatile and competitive in the job market. Their ability to provide insights into human behavior using data-driven tools makes them valuable across sectors.

Public Health and Healthcare

- **Roles:** Health Data Analyst, Behavioral Scientist, Epidemiologist, Health Policy Analyst
- **Prospects:** Graduates can contribute to designing public health interventions, predicting disease outbreaks, and analyzing health-related behaviors to improve patient outcomes.



Marketing and Consumer Insights

- **Roles:** Market Research Analyst, Consumer Behavior Specialist, Data-Driven Marketing Manager
- **Prospects:** Understanding and predicting consumer behavior helps businesses improve products, personalize marketing strategies, and forecast market trends.



Policy Making and Governance

- **Roles:** Policy Analyst, Behavioral Insights Consultant, Public Policy Advisor
- **Prospects:** Graduates can work in government or think tanks to use behavioral data and predictive models to shape effective public policies on issues like mental health, education, and inequality.



Human Resources and Organizational Behavior

- **Roles:** HR Data Analyst, Organizational Development Consultant, Talent Analytics Specialist
- **Prospects:** Predictive analytics can be used to assess employee engagement, predict turnover, and improve workplace culture and productivity.



Education and EdTech

- **Roles:** Learning Analyst, Educational Psychologist, Instructional Designer
- **Prospects:** Graduates can develop predictive models for student performance, personalize learning experiences, and optimize educational programs using behavioral data.

Technology and User Experience

- **Roles:** UX Researcher, Data Scientist, Product Manager
- **Prospects:** Graduates can apply their skills to improve user experience, design data-driven products, and predict user behavior in app development and web design.



Finance and Risk Management

- **Roles:** Behavioral Economist, Risk Analyst, Financial Data Scientist
- **Prospects:** Behavioral analytics is increasingly used in finance to understand investor behaviour, reduce risks, and predict market movements.



Consulting and Advisory Roles

- **Roles:** Management Consultant, Behavioral Science Consultant, Data-Driven Strategy Consultant
- **Prospects:** Consulting firms seek experts who can analyze complex datasets, draw behavioral insights, and provide strategic guidance to businesses and governments.





ADMISSION PROCESS



APPLY NOW

Who can apply

Candidates eligible for JEE Advanced 2026 can apply through online application portal

How to apply?

Please check the updates from the following websites:

- <https://www.iitjammu.ac.in/>
- <https://www.iitjammu.ac.in/hss/>

The advertisement and application portal are accessible at the following link:

- <https://www.iitjammu.ac.in/ug-admissions>



*Online Application Portal opens from 5th June- 30th June, 2026



ACADEMIC
DEPARTMENTS AND
**CENTERS AT
IIT JAMMU**

Departments

- Biosciences and Bioengineering
- Chemical Engineering
- Chemistry
- Civil Engineering
- Computer Science and Engineering
- DIP/CEAC
- Electrical Engineering
- Humanities and Social Sciences
- Materials and Metallurgical Engineering
- Mathematics
- Mechanical Engineering
- Physics

Centers

- Central Computing and Communications Infrastructure
- Central Workshop
- Center for Essential Skills
- Central Instrumentation Facility
- Center for Strategic and Sustainable Infrastructure
- I3C





THE DEPARTMENT OF
**HUMANITIES
AND SOCIAL
SCIENCES**



Faculty



Dr. Amitash Ojha
HoD, Associate Professor



Dr. Ankit Kathuria
Associate Professor



Dr. Ankita Yadav
Visiting Faculty





Prof. Bijoy H Boruah
Advisor



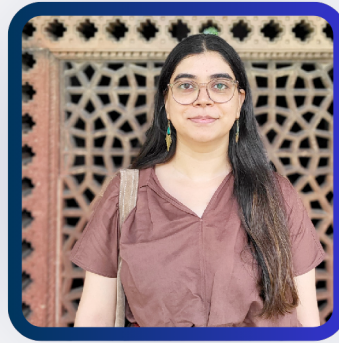
Dr. Garima Singh
Assistant Professor



Dr. Hardeep Singh
Assistant Professor



Dr. Joby Varghese
Assistant Professor



Dr. Malvika Sharma
Assistant Professor



Prof. Meenakshi Rajeev
Professor



Muhammed Haneefa A.P.
Assistant Professor



Dr. Quleen Kaur Bijral
Assistant Professor



Dr. Sanchita Srivastava
Assistant Professor





Dr. Shafkat Shafi Dar
Assistant Professor



Dr. Sukanya Mondal
Assistant Professor



Nivedita Verma
English Language Instructor





STUDENT LIFE & CAMPUS
FACILITIES AT

IIT JAMMU



Academic Clubs

IIT Jammu fosters holistic student development through a range of vibrant academic clubs that go beyond the traditional curriculum. These interdisciplinary clubs—such as the Coding Club, Robotics Club, FinTech/Popular Talk Club, Mesh, SAE-Baja Club, RE4M (Research for Mind), and E-Cell—offer students valuable exposure to various scientific and technical fields. By engaging in hands-on projects, workshops led by industry experts, and student-led competitions and events, members sharpen their practical skills and gain the confidence to address real-world challenges. Supported by dedicated faculty and well-equipped resources, these clubs provide a dynamic platform for collaboration, innovation, and leadership, significantly enriching both academic and professional journeys.



Cultural Clubs

IIT Jammu nurtures a vibrant cultural ecosystem through a variety of clubs that offer a refreshing counterbalance to its strong focus on science and technology. These clubs spanning dance, music, drama, art, literature, photography, and filmmaking, serve as platforms for creative expression and personal development. Valued on par with academic endeavors, they encourage students to explore their passions, build confidence, and grow as individuals. Clubs such as the Photography and Filmmaking Club, Dance Club, Music Club, Literary Club, Fine Arts Club, and Drama Club regularly host events, competitions, and performances that inspire students to push their boundaries. Enriching workshops and speaker sessions further complement these activities, fostering a dynamic and expressive campus culture.



Social Clubs

IIT Jammu hosts several socially driven clubs — such as Kritash: Let’s Create Hope, WYoM, Ek Bharat Shreshtha Bharat (EBSB), and the Nature and Adventure Club (NAC) — that inspire students to look beyond academics and engage meaningfully with the world around them. These clubs encourage active citizenship, compassion, and a commitment to social impact. Kritash enables students to contribute to nearby villages through educational and social initiatives. EBSB offers unique opportunities for cultural exchange and travel, allowing students to experience the rich diversity of India. NAC caters to nature lovers, combining adventure with ecological awareness and exploration. WYoM nurtures a deeper connection to spirituality and inner well-being, supporting students in their journey of holistic development.



Anhad

Anhad: The Realm of Limitlessness is IIT Jammu’s flagship annual techno-cultural fest and the largest of its kind in Jammu & Kashmir. Attracting students from across the region, Anhad offers a vibrant blend of experiences — ranging from cutting-edge technical competitions like Intmaestro to high-energy cultural celebrations such as DJ nights and prom evenings. Spanning five dynamic days, the fest provides a perfect platform for students to connect, showcase their talents, and create unforgettable memories in an atmosphere of creativity, collaboration, and celebration.



The Sports Fest (Pravaah)

The annual inter-branch sports competition is a spirited tradition at IIT Jammu, offering freshers a great way to bond with seniors. As the campus turns into a competitive arena, students give their all through cheers, challenges, and fierce gameplay to win glory for their departments. From cricket and basketball to chess and pool, a variety of games contribute to each branch's score. Beyond the thrill of competition, the weeklong event fosters discipline, teamwork, resilience, and sportsmanship, teaching students to embrace both victory and defeat with grace.



Hostels and Mess Halls

Hostel life at IIT Jammu is a vital part of the student experience, offering more than just accommodation. It fosters independence, self-reliance, and lifelong friendships. The Jagti Campus hosts four main hostels, along with one satellite hostel, all equipped with automatic washing machines and 24/7 Wi-Fi. Rooms are available in both single and double occupancy, furnished with essential amenities including shelves and study space.

IIT Jammu has four spacious and well-ventilated mess halls located in the Egret, Dedhar, Fulgar, and Canary hostels. They serve breakfast, lunch, dinner, and snacks daily. The Mess Committee curates a diverse menu featuring dishes from across India, while the Mess Council oversees daily operations. Regular inspections ensure food quality and smooth functioning.



Medical Facilities

IIT Jammu's medical center, located in the Faculty Quarters, offers 24x7 care with OPD, a 10-bed facility, BLS ambulance, and pharmacy. Specialist visits are regularly arranged. For advanced care, patients are referred to nearby hospitals. Student health is supported through medical insurance and accident coverage.



Counselling Services

IIT Jammu offers confidential, comprehensive counselling services to support students' emotional and academic well-being. With two professional counsellors and empathetic student coordinators, the team provides personalized guidance, peer support, and regular expert-led seminars—helping students manage stress, build resilience, and reach their full potential personally and professionally.



Career Development Services

The Career and Development Services (CDS) at IIT Jammu bridges academia and industry by guiding students in career planning, internships, research, and job opportunities across sectors like tech, core engineering, finance, and consulting. It also supports higher studies and civil services prep, offering expert-led training in communication, interviews, and professional skills.



Our Student Testimonial

Vedant Prafulla Petkar

2025UBS0018

IIT Jammu has been an incredible journey, grounded in exceptional teaching quality and supportive faculty. Engaging with the diverse range of student clubs has given me the perfect space to explore my passions, create content, and build lasting connections. Ultimately, the experience perfectly balances high-level learning with a truly dynamic student life.



Harshit Kumar

2025UBS0021

This course has significantly changed my attitude toward myself and my surroundings. Earlier, I viewed the world as a whole without much reflection, but now I approach it with a more critical perspective. It has helped me become more aware of my environment and enabled me to see the bigger picture.





Our Student Testimonial



Khushi

2025UBS0010

I came for job and placement initially. But this program gave me something I wasn't looking for : a way to understand life itself. It makes you think about things that no other course does - like why people act the way they do..?? Then it gives you the tools to find answers. You learn about other's behaviour, also building skills in coding, data science, and a broader interdisciplinary and at some point, you start to learn about yourself too. Being a student of the first batch here taught me that the best classrooms don't always have clear answers. Instead, they let you question, think, and see things in new ways.



Aniket Khanna

2025UBS0020

The overall experience in BS program was actually chill as compared to other branches you could easily socialise given the curriculum the with the right friends you can make your life quite happening.



Contact Us

We are here to support you as you explore the journey of joining IIT Jammu and the Department of Humanities and Social Science. Whether you are a prospective student, a parent, or an academic collaborator, we welcome your questions and are happy to guide you through the process. Feel free to reach out to us—our team is here to help.

For any query related to UG admission, please write to us at



Email

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विद्याधनं सर्वधनं प्रधानम्

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