

# BSc (Hons.) in **ALLIED SCIENCES**



An innovative course structure  
redefining the Science Stream



Affiliated  
to VTU



Accredited  
by NAAC

Bsc in Allied Sciences is an innovative course designed to support multidisciplinary yet a focussed learning approach to excel as competent professionals, enabling them to design their curriculum as per their own chosen career pathway.

# WHAT MUST YOU COMPLETE?

## Bsc in Allied Sciences (3yrs) - 120 Credits

- 4 Foundation Courses
- 12 Core Courses
- 3 Discipline Specific Courses
- 6 Interdisciplinary Electives on Emerging Areas
- 4 Ability Enhancement Electives
- 3 General Electives
- Internships + Projects/ Research+Dissertation

## BSc(Hons) in Allied Sciences (4yrs) - 160 Credits

- 4 Foundation Courses
- 16 Core Courses
- 4 Discipline Specific Courses
- 8 Interdisciplinary Electives on Emerging Areas
- 4 Ability Enhancement Electives
- 3 General Electives
- Internships + Projects/ Research+Dissertation

Degree	Core Subjects		Discipline Specific Electives		Generic + Interdisciplinary Electives		Ability Enhancement Courses		Total
	Subjects	Credits	Subjects	Credits	Subjects	Credits	Subjects	Credits	
Three Year	12	54	03	09	09	26	04	10	99+21*=120
Four Year	16	72	07	21	11	32	04	10	135+25*=160

\* Field survey credits - 02, Credits for Project - 04+01, Credits for Certification - 02, Credits for Internship - 04, Foundation Course Credits - 12



# PROGRAM HIGHLIGHTS

Bespoke  
Course  
Structure

Industry  
Oriented  
Curriculum

Multidisciplinary &  
Interdisciplinary  
Supportive Learning

Choice  
Based Credit  
System

Exposure to  
Research as a  
Career Path

## NEW AGE COURSES AS MINORS:

- Design Thinking
  - Nano Technology
  - Cyber Security
  - Machine Learning
  - Mass Communication
  - Logistics & Supply Chain Management
- .... and many more!

## INDICATIVE INDUSTRIES FOR CAREER OPTIONS:



Electronics  
& Optics



Telecommunication



IT & ITes



Pharmaceutical



Food & Beverage



Industrial  
Solutions



Data  
Sciences



Big Data



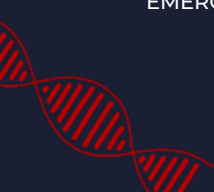
Data  
Analytics



Year	Foundation / Pre Requisite Subjects	Core Subjects (Theory+ Labs )	Elective Subjects				
			Discipline / Stream Specific Elective ( DSE ) Course	Generic / Multi or Inter Disciplinary Nature (GE/ MDE / IDE ) Emerging Areas	General Electives (Other Areas)		
	<ol style="list-style-type: none"> <li>1. Indian History</li> <li>2. Economics</li> <li>3. Social Science</li> <li>4. Indian Constitution</li> <li>5. Marketing</li> <li>6. Design Thinking</li> <li>7. PBL</li> </ol>	<ol style="list-style-type: none"> <li>1. Physics</li> <li>2. Chemistry</li> <li>3. Mathematics</li> <li>4. Computer Science</li> </ol>	<ol style="list-style-type: none"> <li>1. Waves &amp; Optics</li> <li>3. Classical Dynamics</li> <li>5. Physical Chemistry</li> <li>7. Inorganic Chemistry</li> <li>9. Graph Theory</li> <li>11. Discrete Mathematics</li> <li>13. Statistical Mechanics</li> <li>15. Topology</li> <li>17. Radiation Science</li> </ol>	<ol style="list-style-type: none"> <li>2. Electricity &amp; Magnetism</li> <li>4. Quantum Mechanics</li> <li>6. Organic Chemistry</li> <li>8. Fluid Dynamics</li> <li>10. Statistics</li> <li>12. Mathematical Physics</li> <li>14. Mathematical Modelling</li> <li>16. Geology</li> <li>18. Electro Magnetism</li> </ol>	<ol style="list-style-type: none"> <li>1. Nano Science</li> <li>3. Environmental Science</li> <li>5. Industrial Mathematics</li> <li>7. Machine Learning</li> <li>9. Data Analytics</li> <li>11. Big Data</li> <li>11. Cyber Security</li> <li>13. E- Commerce</li> <li>15. Digital Marketing</li> <li>15. Waste Management</li> <li>17. Renewable Energy Sources</li> <li>19. Library Science</li> <li>21. Waste Management</li> </ol>	<ol style="list-style-type: none"> <li>2. Nano Technology</li> <li>4. Earth Science</li> <li>6. Instrumentation</li> <li>8. Artificial Intelligence</li> <li>10. Data Science</li> <li>12. Design Thinking</li> <li>12. Internet of Things</li> <li>14. Innovation &amp; Entrepreneurship</li> <li>16. Industry 4.0 STP</li> <li>18. Space Science</li> <li>20. Intellectual Property Rights</li> </ol>	<ol style="list-style-type: none"> <li>1. Survey Sampling and Indian Official Statistics</li> <li>2. Yoga</li> <li>3. Music</li> <li>4. Fine Arts</li> <li>5. Urban Planning</li> <li>6. Rural Development</li> </ol>
1st Year	4 Courses on Foundation Subjects (12 Credits)	4 Courses on Core Subjects (20 Credits)					
2nd Year		4 Courses on Core Subjects (18 Credits)			2 Courses in Emerging Areas (12 Credits)		
3rd Year		4 Courses on Core Subjects (16 Credits)	3 Discipline Specific Electives (9 Credits)		2 Courses in Emerging Areas (6 Credits)	1 General Elective (Other) 2 Credits	
4th Year		4 Courses on Core Subjects (18 Credits)	4 Discipline Specific Electives (12 Credits)		2 Courses in Emerging Areas (6 Credits)		

● For Minor Degree with 4 Year Regular Degree : Innovation , Design Thinking , IPR OR ANY OF THE EMERGING AREAS

● Any Student with CGPA Higher than 7.0 or earned more than 20 per semester are eligible to register for additional credits in special areas related to core or general towards the minor degree





Year	Elective Subjects		Field Survey	Publication in terms of paper in reputed journals/ patent	Certification	Research / Industry Based Intership	Dissertation / Project	Industry Based Internship
	General Electives ( Arts & Commerce Section )	Ability Enhancement Compulsory Courses ( AECC )						

Year

1. Economy
2. Micro and Macro Economy
3. Mass Communication & Journalism
4. Logistics & Supply Chain Management
5. Public Relations & Corporate Communication
6. Public Administration
7. Finance & Banking
8. Hospitality & Hotel Management
9. Event Management
10. Corporate Social Responsibilities

1. Indian Languages and Skills
2. Foreign Languages
3. Business English
4. Environmental Science

1st Year

2 AECC Courses (Language & Environmental Science) - 6 Credits

1 Field Survey (2 Credits)

2nd Year

2 Generic Electives in Arts Stream (6 Credits)

2 AECC Courses (Language & Environmental Science) - 4 Credits

3rd Year

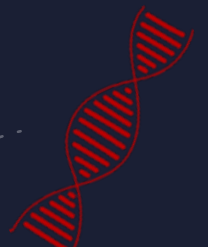
Publication in terms of paper in reputed journals/ patent - 1 Credits

Professional Certification Course / Sports / NSS / NCC / Language Proficiency - 2 Credits

Research Project (04 Credits)

4th Year

Internship - 4 Credits



“ Changing Business Scenarios require evolved and customised courses to help students find newer and better job opportunities. The 4 year comprehensive course in Allied Sciences will help the students understand the depth & interconnectivity of Major Science Streams”

## THIS COURSE IS A-

- Recognition that each pupil develops at their own pace in their own learning style
- Gives a holistic approach towards the possibility of multidisciplinary learning
- Focuses on the individual development instead of collective approach
- Facilitates acquiring the complete essence of Sciences to face the competitive market
- Provides an opportunity to develop intellectually competent and professionally skilled personnel to thrive in the present volatile business world



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