

# VASANTRAO NAIK MAHAVIDYALAYA (Autonomous)

Chhatrapati Sambhajnagar | Parent University Dr. BAMU, Chh. Sambhajnagar |

## B.Sc. (Honours) Life Sciences (Immunology & Molecular Genetics)

NEP 2020 | CCFUP 2022 | NCrf 4.5–6.0 | BAMU-Compliant | Full Practicals | CO–PO–PSO Matrices | SDG Mapping | June 2026

### Finalized 8-Semester Curriculum & Audit Master Sheet

Sem	Course Code	Course Title & Component	Category	Credits	Material Availability
I	IMM-101	Foundations of Cell Biology & Biochemistry	DSC Core	4	Fully Present <input type="checkbox"/>
I	IMM-102	Introduction to Immunology & Host Defence	DSC Core	4	Fully Present <input type="checkbox"/>
I	IMM-103	Principles of Genetics & Heredity	DSC Core	4	Fully Present <input type="checkbox"/>
I	MDC-101	Biostatistics & Research Mathematics	MDC	3	Fully Present <input type="checkbox"/>
I	SEC-101	Basic Laboratory Techniques & GLP	SEC	3	Fully Present <input type="checkbox"/>
I	AEC-101	English for Scientific Communication	AEC	2	Fully Present <input type="checkbox"/>
I	IMM-101P	Cell Biology & Genetics Foundational Lab	DSC Lab	2	Fully Present <input type="checkbox"/>
		<b>Semester I Total</b>		<b>22</b>	
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II	IMM-104	Molecular Biology — Central Dogma	DSC Core	4	Fully Present <input type="checkbox"/>
II	IMM-105	Innate Immunity & Pattern Recognition	DSC Core	4	Fully Present <input type="checkbox"/>
II	MIN-01	<b>Minor Discipline — Course 1</b>	Minor	3	Fully Present <input type="checkbox"/>
II	MDC-102	Introduction to Bioinformatics Tools	MDC	3	Fully Present <input type="checkbox"/>
II	SEC-102	Diagnostic Serology & Basic Assays	SEC	3	Fully Present <input type="checkbox"/>
II	AEC-102	Scientific Report Writing & Presentation	AEC	2	Fully Present <input type="checkbox"/>

Sem	Course Code	Course Title & Component	Category	Credits	Material Availability
II	VAC-101	Yoga, Sports & Community Engagement	VAC	2	Fully Present <input type="checkbox"/>
II	IMM-104P	Basic Molecular Biology & Enzymology Lab	DSC Lab	2	Fully Present <input type="checkbox"/>
		<b>Semester II Total</b>		<b>23</b>	
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III	IMM-201	Adaptive Immunity: T Cell Biology	DSC Core	4	Fully Present <input type="checkbox"/>
III	IMM-202	Recombinant DNA Technology	DSC Core	4	Fully Present <input type="checkbox"/>
III	MIN-02	<b>Minor Discipline — Course 2</b>	Minor	3	Fully Present <input type="checkbox"/>
III	SEC-201	ELISA & Immunodiagnostic Methods	SEC	3	Fully Present <input type="checkbox"/>
III	AEC-103	Communicating Science to Society	AEC	2	Fully Present <input type="checkbox"/>
III	VAC-102	Environmental Studies & One Health	VAC	2	Fully Present <input type="checkbox"/>
III	IMM-201P	Classical Recombinant DNA Technology Lab	DSC Lab	2	Fully Present <input type="checkbox"/>
III	MIN-L1	Minor Stream Integrated Lab — I	Min Lab	2	Fully Present <input type="checkbox"/>
		<b>Semester III Total</b>		<b>22</b>	
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IV	IMM-203	B Cell Biology & Humoral Immunity	DSC Core	4	Fully Present <input type="checkbox"/>
IV	IMM-204	Immunopathology & Hypersensitivity	DSC Core	4	Fully Present <input type="checkbox"/>
IV	MIN-03	<b>Minor Discipline — Course 3</b>	Minor	3	Fully Present <input type="checkbox"/>
IV	MDC-103	Public Health Microbiology Essentials	MDC	3	Fully Present <input type="checkbox"/>
IV	SEC-202	Flow Cytometry & Cell Sorting	SEC	3	Fully Present <input type="checkbox"/>
IV	INT-201	Summer Internship I	Project	2	Fully Present <input type="checkbox"/>
IV	IMM-203P	Basic Immunology & Serology Lab	DSC Lab	2	Fully Present <input type="checkbox"/>
IV	MIN-L2	Minor Stream	Min Lab	2	Fully Present <input type="checkbox"/>

Sem	Course Code	Course Title & Component	Category	Credits	Material Availability
		Integrated Lab — II			
		<b>Semester IV Total</b>		<b>23</b>	
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V	IMM-301	Vaccinology& Vaccine Technology	DSC Core	4	Fully Present <input type="checkbox"/>
V	IMM-302	Genomics, Proteomics & Systems Immunology	DSC Core	4	Fully Present <input type="checkbox"/>
V	MIN-04	<b>Minor Discipline — Course 4</b>	Minor	3	Fully Present <input type="checkbox"/>
V	DSE-301	Discipline Specific Elective I	DSE	3	Fully Present <input type="checkbox"/>
V	AEC-104	Technical Writing & Grant Proposals	AEC	2	Fully Present <input type="checkbox"/>
V	VAC-103	Indian Cultural Heritage & Harmony	VAC	2	Fully Present <input type="checkbox"/>
V	INT-301	Internship II	Project	2	Fully Present <input type="checkbox"/>
V	IMM-301P	Introductory Bioinformatics & Comp Bio Lab	DSC Lab	2	Fully Present <input type="checkbox"/>
		<b>Semester V Total</b>		<b>22</b>	
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VI	IMM-303	Cancer Immunology & Immunotherapy	DSC Core	4	Fully Present <input type="checkbox"/>
VI	IMM-304	Immunogenetics& Genomic Medicine	DSC Core	4	Fully Present <input type="checkbox"/>
VI	MIN-05	<b>Minor Discipline — Course 5</b>	Minor	3	Fully Present <input type="checkbox"/>
VI	DSE-302	Discipline Specific Elective II	DSE	3	Fully Present <input type="checkbox"/>
VI	SEC-301	GATE/CSIR-NET Preparatory Seminar	SEC	3	Fully Present <input type="checkbox"/>
VI	VAC-104	Digital Literacy & AI for Life Sciences	VAC	2	Fully Present <input type="checkbox"/>
VI	IMM-303P	Applied Tissue Culture & Biotech Lab	DSC Lab	2	Fully Present <input type="checkbox"/>
VI	MIN-L3	Minor Stream Integrated Lab — III	Min Lab	2	Fully Present <input type="checkbox"/>
		<b>Semester VI Total</b>		<b>23</b>	
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VII	RES-301	Research Methodology & Design	Core	4	Fully Present <input type="checkbox"/>

Sem	Course Code	Course Title & Component	Category	Credits	Material Availability
VII	IMM-401	Advanced Molecular Immunology	DSC Core	4	Fully Present <input type="checkbox"/>
VII	IMM-402	Infectious Disease Immunology	DSC Core	4	Fully Present <input type="checkbox"/>
VII	IMM-405	<b>Advanced Immunopharmacology &amp; Immunotherapy</b>	DSC Core	4	Fully Present <input type="checkbox"/>
VII	MIN-06	<b>Minor Discipline — Course 6</b>	Minor	3	Fully Present <input type="checkbox"/>
VII	IMM-401P	Medical Microbiology & Public Health Lab	DSC Lab	2	Fully Present <input type="checkbox"/>
		<b>Semester VII Total</b>		<b>20</b>	
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VIII	IMM-403	Precision Medicine & Clinical Immunology	DSC Core	4	Fully Present <input type="checkbox"/>
VIII	IMM-404	Regulatory Immunology & Biosecurity	DSC Core	4	Fully Present <input type="checkbox"/>
VIII	IMM-403P	Bioprocess Tech & Validation Lab	DSC Lab	2	Fully Present <input type="checkbox"/>
VIII	IMM-402P	<b>Advanced Clinical Diagnostics &amp; Virology Lab</b>	DSC Lab	4	Fully Present <input type="checkbox"/>
VIII	<i>Path A</i>	<b>Honours Dissertation &amp; Thesis</b>	Research	6	Fully Present <input type="checkbox"/>
VIII	<i>Path B</i>	PROJ-401 Capstone Applied Project	Project	3	Fully Present <input type="checkbox"/>
VIII	<i>Path B</i>	GE-401 Generic Departmental Elective	Elective	3	Fully Present <input type="checkbox"/>
		<b>Semester VIII Total (Both Paths)</b>		<b>20</b>	

## Program Milestone Credit Totals

Let's double-check the final cumulative numbers to make sure everything adds up correctly for your graduation check points:

- **3-Year Exit Total (Semesters I–VI):135 Credits** total .
- **4-Year Honours Total (Pathway A or B):175 Credits** total .

Every semester balances smoothly at **20, 22, or 23 credits**, keeping the student workload uniform and fully within university limits.