

# MS Biotechnology

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## Semester 1

Course Code	Course Title	Credit Hours
BNB-751	Applications of Biotechnology	3(3-0)
BNB-753	Genetic Engineering	3(3-0)
BNB-755	Biotechnology Fundamentals	3(3-0)
BNB-757	Bioprocess Technology	3(3-0)
	<b>Total</b>	<b>12</b>

## Semester 2

Course Code	Course Title	Credit Hours
	Specialization-I	3
	Specialization-II	3
	Elective-I	3
	Elective-II	3
	<b>Total</b>	<b>12</b>

## Semester 3

Course Code	Course Title	Credit Hours
BNB-728	Seminar (General)	1(0-1)
BNB-730	Thesis/Dissertation	6(0-6)
	<b>Total</b>	<b>07</b>

## Semester 4

Course Code	Course Title	Credit Hours
BNB-730	Thesis/Dissertation	6(0-6)
	<b>Total</b>	<b>06</b>

# Specialization Track Courses

<b>Course Code</b>	<b>Course Title</b>	<b>Credit Hours</b>
BNB-752	Techniques in Biotechnology	3(3-0)
BNB-754	Stem Cell Technology	3(3-0)
BNB-756	Fermentation Biotechnology	3(3-0)
BNB-758	Molecular Virology	3(3-0)
BNB-760	Plant-Microbe Interaction	3(3-0)

# Elective Courses

<b>Course Code</b>	<b>Course Title</b>	<b>Credit Hours</b>
BNB-782	Plant Biotechnology	3(3-0)
BNB-784	Medical Biotechnology	3(3-0)
BNB-786	Molecular Data Analysis	3(3-0)
BNB-788	Metabolic Pathway Engineering	3(3-0)