

## **MDDA - Biotech/Pharma Emphasis**

### **Overview**

The Medical Technology-Biotech/Pharma Emphasis focuses on the intersection of biology, chemistry, and medicine in developing therapeutic solutions. Students explore drug discovery processes, biotechnology applications, pharmaceutical sciences, and the regulatory pathways for bringing new treatments to market. This track prepares graduates for careers in pharmaceutical companies, biotechnology firms, research institutions, or regulatory agencies, with strong preparation for advanced studies in pharmacology, biotechnology, or related fields.

### **Sample 4-Year Plan**

<b>FIRST YEAR</b>	<b>Credits</b>	<b>SECOND YEAR</b>	<b>Credits</b>
<b>1st Semester</b>		<b>3rd Semester</b>	
<b>ENGL 101</b>	3	ECOL 182R	3
<b>MATH 112</b>	3	PHYS 102/181	4
<b>BSM 101</b>	2	ACCT 250	3
<b>Gen Ed - Building Connections</b>	3	Gen Ed - Exploring Perspectives	3
<b>Second Language</b>	4	UNIV 101	1
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>14</b>
<b>2nd Semester</b>		<b>4th Semester</b>	
<b>ENGL 102</b>	3	PHYS 103/182	4
<b>CHEM 130</b>	4	PSIO 201	4
<b>MCB 181R &amp; L</b>	4	BSM 305	3
<b>Statistics (MATH 163/263)</b>	3	ECON 200	3
<b>Gen Ed - Exploring Perspectives</b>	3	Gen Ed - Exploring Perspectives	3
<b>Total</b>	<b>17</b>	<b>Total</b>	<b>17</b>

<b>THIRD YEAR</b>	<b>Credits</b>	<b>FOURTH YEAR</b>	<b>Credits</b>
<b>5th Semester</b>		<b>7th Semester</b>	
<b>PSIO 202</b>	4	LAW 478A	3
<b>BSM 441</b>	3	BME 486	3
<b>PHCL 386</b>	3	HSD 410	3
<b>BNAD 302</b>	3	Biotech/Pharma Elective	3
<b>Gen Ed - Exploring Perspectives</b>	3	General Elective	3
<b>Total</b>	<b>16</b>	<b>Total</b>	<b>15</b>
<b>6th Semester</b>		<b>8th Semester</b>	
<b>BNAD 303</b>	3	Biotech/Pharma Elective	3
<b>ENTR 481A</b>	2	Biotech/Pharma Elective	3
<b>BSM 4** (Hands-on Experience)</b>	3	Biotech/Pharma Elective	3
<b>HSD 401</b>	3	General Elective	3
<b>Gen Ed - Building Connections</b>	3	UNIV 301	1
<b>Total</b>	<b>14</b>	<b>Total</b>	<b>13</b>

**Biotech/Pharma Emphasis Electives (Choose 4 courses):**

- CHEE 489 Nanomedicine Engineering
- MED 497 Research Development
- PHCL 412 Intro to Pharmacology
- PHCL 460 Designing Drugs
- PHCL 467 Medicines to Market