



2018-2019  
STEM ENDORSEMENT

## Biotechnology

*Young Women's Leadership Academy at Arnold*

Grade	Language Arts	Math	Science	Social Studies	Required CTE Courses	Potential Certification Opportunities: <i>Italics are possible new certifications</i>
9 <sup>th</sup>	English 1	Algebra 1	Biology	World Geography	Principles of Bioscience (One Credit)	OSHA, Cyber Safety, WFR Employability, WFR Customer Service,
10 <sup>th</sup>	English 2	Geometry	Approved 2 <sup>nd</sup> Year Science	World History Or Political Science	Biotechnology I (One Credit)	
11 <sup>th</sup>	AP Literature	Approved 3 <sup>rd</sup> Year Math	Approved 3 <sup>rd</sup> Year Science	U.S. History	Biotechnology II (One Credit)	<i>Sterile Processing and Distribution Technician</i>
12 <sup>th</sup>	Approved 4 <sup>th</sup> Year English	Approved 4 <sup>th</sup> Year Math	Approved 4 <sup>th</sup> Year Science	Government (1 semester)  Economics (1 semester)	Practicum in STEM Biotechnology (Two Credits)	<i>Lab Technician,</i> CPR HIPPA OSHA Healthcare

### Career & Technical Student Organizations:

SkillsUSA  
NTHS

### Dual Credit/ AP Offerings:

Government      Economics      Calculus  
Biology            Physics            Computer Science  
Spanish Literature   Spanish Language   English Literature  
English Language

### Required Electives:

Fine Arts  
Health  
Foreign Language  
Physical Education

### Additional Recommended Electives:

Journalism (One Credit)  
Political Science (One Credit)  
Forensic Science (One Credit)  
Robotics (One Credit)  
Computer Science On-Ramps (One Credit)  
Principles of AAVT (1 Credit)

Sample Career Opportunities	High School	On the Job Training	Certificate	Associate's Degree	Bachelor's Degree	Advanced College Degree	Average Annual Salary	Possible Majors for this Pathway
Biomedical Engineer					X	X	\$88,000	*Biomedical Engineer
Bio-Mechanical Engineer					X		\$84,048	*Mechanical Engineer
Electronics Systems Engineer/Bioinstrumentation					X		\$97,970	*Chemical Engineer *Electrical/Electronics
Clinical Engineer					X		\$92,236	Engineer
Biophysicists & Biochemists					X	X	\$91,190	*Physics
Biomed Field Service Engineer					X		\$63,000	*Chemistry *Biology
Biomedical Equipment Technician				X			\$27,443	*Biochemistry *Molecular Genetics
Genetics Counselor						X	\$44,986	

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