



**DESCRIPTION:**

Biomedical engineers/Bioengineers seek to close the gap between engineering and medicine. Biomedical engineering combines the design and problem solving skills of engineering with medical and biological sciences to improve healthcare diagnosis, monitoring and therapy.

Biomedical engineering has only recently emerged as its own discipline; much of the work in biomedical engineering consists of research and development, spanning a broad array of subfields:

- |                            |                      |
|----------------------------|----------------------|
| Bionics                    | Medical devices      |
| Tissue engineering         | Medical imaging      |
| Genetic engineering        | Implants             |
| Neural engineering         | Clinical engineering |
| Pharmaceutical engineering |                      |

**Where do they work?**

- Research facilities
- Pharmaceutical companies

**COMPANIES WHO HIRE IN KANSAS CITY:**

- Bayer
- MRJ Global

**EXAMPLE WORK PROJECTS**



Novilase is an interstitial laser therapy system to treat breast tumors. The hope is that it will replace lumpectomy procedures as a minimally invasive standard of care for the removal of small tumors.



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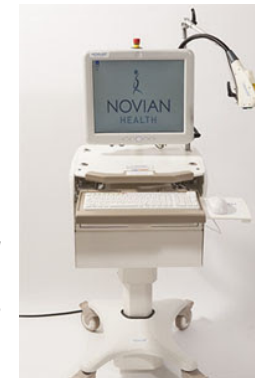
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## WHAT SHOULD I DO IN HIGH SCHOOL TO PREPARE MYSELF FOR BIOMECHANICAL ENGINEERING DEGREE?

- Join Project Lead the Way
- Attend IGED
- Take practice ACT / SAT
- Biology Class
- Math Classes

## REGIONAL SCHOOLS WHO HAVE THIS MAJOR:

Wichita State  
University of Kansas  
Iowa State  
Kansas State  
Oklahoma State

## STUDENT INVOLVEMENT:

- National Society of Professional Engineers (NSPE)
- Society of Women Engineers (SWE)
- National Association for Biomedical Research (NABR)

## COURSE LOAD:

University Requirements: 24 hrs  
Engineering Requirements: 11 hrs  
Math Requirements: 16 hrs  
Science Requirements: 35 hrs  
Civil Engineering Core Classes: 16 hrs  
Civil Engineering Electives: 26 hrs  
Total: 128 hrs

## SALARY RANGE:

Bachelor's degree candidates  
National average starting salary range:  
\$45,000 - \$58,000

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