

Bachelor of Science, Kinesiology (BSc, Kin)

Biomechanics Major

For Kinesiology Students Admitted in Fall 2015 onwards

It is the responsibility of the student to ensure graduation requirements are met. Program details may be found in the University of Calgary [Academic Calendar](#)

Units	Core (54 units)	
3	KNES 201	Activity: Essence and Experience
3	KNES 203	Activity: Health, Fitness, and Performance
3	KNES 213	Introduction to Research in Kinesiology
3	KNES 237	Introduction to Nutrition
3	KNES 244	Introduction to Socio-Cultural Aspects of Sport
3	KNES 251	Introduction to Motor Control and Learning
3	KNES 253	Introduction to Exercise and Sport Psychology
3	KNES 259	Human Anatomy and Physiology I
3	KNES 260	Human Anatomy and Physiology II
3	KNES 263	Quantitative Biomechanics
3	KNES 323	Integrative Human Physiology
3	KNES 344	Gender, Sexuality and Sport
3	One of	KNES 351 Cognition and Learning in Human Movement, KNES 397 Health and Exercise Psychology or KNES 399 Sport Psychology
3	KNES 355	Human Growth and Development
3	KNES 363	Biomechanics of Biological Materials
3	KNES 372	Foundations of Sport Medicine
3	KNES 373	Exercise Physiology
3	One of	STAT 205 Introduction to Statistical Inquiry or STAT 213 Introduction to Statistics I
*BMEC students are recommended to take STAT 213		
Biomechanics Major Requirements (36 units)		
3	MATH 211	Linear Methods I
3	MATH 275	Calculus for Engineers and Scientists
3	MATH 277	Multivariable Calculus for Engineers and Scientists
3	ENGG 201	Behaviour of Liquids, Gases and Solids
3	ENGG 202	Engineering Statics
3	ENGG 311	Engineering Thermodynamics
3	One of	ENGG 317 Mechanics of Solids; ENME 317 Mechanics of Deformable Solids I
3	ENGG 349	Dynamics
1.5	KNES 393	Research Seminar I
1.5	KNES 395	Research Seminar II
3	KNES 463	Advanced Techniques in Biomechanics
6	One of	KNES 466 Biomechanics Research Project or KNES 490 Honours Project*

SENIOR KINESIOLOGY OPTIONS (12 units)

3_____ 3_____ 3_____ 3_____

OPTIONS - KINESIOLOGY OR NON-KINESIOLOGY, JUNIOR OR SENIOR (18 units)

3_____ 3_____ 3_____

3_____ 3_____ 3_____

NOTE: A total of 120 units are required.

No more than 60 units may be transfer credit, of those no more than 27 may be core courses.

No more than 60 units at the 200 level may be applied to any Kinesiology degree.

At least 15 units of non-Kinesiology courses are required.

No more than 45 units of non-Kinesiology courses may be used toward Kinesiology degree requirements.

*Enrollment in KNES 490 is contingent on acceptance into the Honours program.

Note for Biomechanics Students:

To ensure proper degree progression, the following key courses should be taken according to the pattern below. Unlisted requirements can be taken with greater flexibility.

First Year	
Fall	Winter
KNES 259	KNES 260
MATH 211	KNES 263
MATH 275	MATH 277
PHYS 211* OR KNES 201**/203	KNES 201**/203
STAT 205/213	ENGG 201/202
* Students <u>without</u> Physics 30 must enroll in PHYS 211 for Fall. Students <u>with</u> Physics 30 do not need to take PHYS 211.	
** Students must take KNES 201 in Fall or Winter of their first year	

Second Year	
Fall	Winter
KNES 363	ENGG 311
ENGG 201/202	
Notes: <ul style="list-style-type: none">- All 200-level KNES courses should be completed by the end of 2nd year.- KNES 323 should be completed in 2nd or 3rd year	

Third Year	
Fall	Winter
KNES 463	KNES 395
KNES 393	ENGG 317/ENME 317
ENGG 349	
Notes: <ul style="list-style-type: none">- KNES 323 should be completed in 2nd or 3rd year- KNES 373 should be completed by the end of 3rd year	

Fourth Year	
Fall	Winter
KNES 466A	KNES 466B