

## Courses Transferrable from Brandon University to University of Manitoba Engineering Program

Brandon University Course		Year	Civil	Mech	Elec	Comp	Biosys	University of Manitoba Equivalent		
Course Code	Course Name							Course Code	Course Name	
<b>YEAR 1</b>										
CHEM 18.160	General Chemistry I	Year 1	3	3	3	3	3	CHEM 1300	University Chemistry 1	
ENGL 30.162 Or ENGL 30.146	Intro Canadian Literature Intro English Literature	Year 1	3	3	3	3	3	ENGL 1400 ENGL 1200	Thematic Approaches Representative Literary Works	
MATH 62.181	Intro Calculus I	Year 1	3	3	3	3	3	MATH 1500	Intro Calculus 1	
MATH 62.191	Calculus II	Year 1	3	3	3	3	3	MATH 1700	Calculus 2	
	Complimentary Studies Elective #1 (Any Arts or Management Course)	Year 1	3	3	3	3	3		See list of possible Complimentary Studies Electives	
PHYS 74.161	Foundations of Physics 1	Year 1	3	3	3	3	3	PHYS 1050	Physics – Mechanics	
	Complimentary Studies Elective #2 (Any Arts or Management Course)		3	3	3	3	3		See list of possible Complimentary Studies Electives	
	Free Elective #1						3		Free Elective – can be any course of interest that has a UM equivalency	
GEOL 42.160	Intro to Earth Science		3					GEOL 1340	Dynamic Earth	
<b>YEAR 2</b>										
CHEM 18.170	General Chemistry II	Year 2	3	3	3*	3*	3	CHEM 1310	University Chemistry 2 *Natural Science Elective	
STAT 62.171 and STAT 62.172	Intro to Statistics Intro to Statistical Inference	Year 2	3	3	3	3	3	STAT 1000 STAT 2000	Basic Statistics 1 Basic Statistics 2	
BIOL 15.264	Medical Microbiology						3	MBIO 1220	Essentials of Microbiology	
BIOL 15.171 and BIOL 15.172	Human Anat. and Physiology 1 Human Anat. and Physiology 2	Year 2 Year 2						3 3	BIOL 1410 And BIOL 1412	Anatomy of Human Body and Physiology of the Human Body
BIOL 15.162 and BIOL 15.163	Cells, Genetics and Evolution Biodiversity/Function/Interaction							3	BIOE 2590	Biology for Engineers
	Natural Science Elective						3		Natural Science Elective – see list for selection of courses	
COMP 62.161	Computer Science II	Year 2					3	COMP 1020	Computer Science 2	
	Complimentary Studies Elective #3 (Any Arts or Management Course)						3		See list of possible Complimentary Studies Electives	
	Free Elective #2						3		Free Elective – can be any course of interest that has a UM equivalency	
<b>Total No. of Courses Transferred</b>			<b>10</b>	<b>9</b>	<b>9</b>	<b>11</b>	<b>16</b>			
<b>Total Number of Credit Hours Transferred</b>			<b>30</b>	<b>27</b>	<b>27</b>	<b>33</b>	<b>48</b>			
<b>Approx. total Number of Credit Hours in Program (min.)</b>			<b>164</b>	<b>157-159</b>	<b>159-160</b>	<b>157-161</b>	<b>150-154</b>			

Special Note: Each student transferring must have CEAB/AU calculations completed to ensure compliance.

**Complimentary Studies Elective possibilities:**  
(Any Arts or Management Course)

Brandon University		University of Manitoba Equivalent		
Course	Credit Hrs.	Course	Credit Hrs.	Comments
ANTH 12.153 Intro Cultural Anthropology	3	ANTH 1220 Cultural Anthro	3	Last assessed Summer 2011
ANTH 12.170 Society And Culture	3	ANTH 1220 Cultural Anthro	3	Last assessed Fall 2011
ANTH 12.173 Human Origins	3	ANTH 1210 Orig&Ant of Man	3	Last assessed Summer 2011
BUS 16.151 Financial Accounting	3	ACC 1100 Intro Fin Acctg	3	Last assessed Fall 2011
BUS 16.180 Intro Information Mgmt	3	MIS 2000 Information Sys	3	Last assessed Fall 2015
BUS 16.261 Marketing Fundamentals	3	MKT 2210 Fund Marketing	3	Last assessed Fall 2011
BUS 16.262 Intro Organizational Behaviour	3	GMGT 2070 Intro Org Beh	3	Last assessed Winter 2012
BUS 16.294 Business Law II	3	GMGT 3300 Commercial Law	3	Last assessed Fall 2016
ECON 22.181 Principles of Econ - Macro	3	ECON 1020 Intro Macroeconomics	3	Last assessed Winter 2012
ECON 22.182 Principles of Econ - Micro	3	ECON 1010 Intro Microeconomics	3	Last assessed Winter 2012
ENGL 30.146 Intro English Literature	6	ENGL 1200 Rep Lit Works	6	Last assessed Fall 2015
ENGL 30.161 20th Century Literature	3	ENGL 1XXX Transfer 1000 Lvl	3	Last assessed Fall 2015
ENVR 31.192 Environmental/Resource Issues	3	ENVR 1000 Envsci Concepts	3	Last assessed Fall 2015
GERM 58.151/152 Intro German I, II	6	GRMN 1120 Begin German	6	Last assessed Fall 2011
HEB 86.101 Introductory Hebrew	6	RLGN 1120 Biblical Hebrew	6	Last assessed Fall 2011
HIST 54.153 World History To 1500	3	HIST 1XXX Transfer 1000 Lvl	3	Last assessed Fall 2011
HIST 54.154 World History Since 1500	3	HIST 1500 Mod World Hist	3	Last assessed Fall 2013
HIST 54.155 Canada To Confederation	3	HIST 1390 Col C 1500-1885	3	Last assessed Fall 2011
HIST 54.156 Canada Since Confederation	3	HIST 1400 Can Nat Si 1867	3	Last assessed Fall 2011
NAT 68.152 Intro To Native Studies II	3	NATV 1240 Nat Peop Can II	3	Last assessed Fall 2011
NAT 68.155 Intro To Cree Language I	3	NATV 1250 Intro Cree I	3	Last assessed Winter 2011
NAT 68.156 Intro To the Cree Language II	3	NATV 1260 Intro Cree II	3	Last assessed Fall 2011
NAT 68.157 Intro To Sauteaux Lang I	3	NATV 1270 Intro Ojibwa	3	Last assessed Fall 2011
NAT 68.158 Intro To Sauteaux Lang II	3	NATV 1280 Intro Ojibwa II	3	Last assessed Fall 2011
NAT 68.163 Intro To Native Language I	3	NATV 1XXX Transfer 1000 Lvl	3	Last assessed Fall 2011
NAT 68.164 Intro To Native Language II	3	NATV 1XXX Transfer 1000 Lvl	3	Last assessed Fall 2011
NAT 68.180 North Amer Native Art Hist I	3	NATV 1XXX Transfer 1000 Lvl	3	Last assessed Fall 2011
NAT 68.181 Canadian Aboriginal Art Hist	3	NATV 1XXX Transfer 1000 Lvl	3	Last assessed Fall 2011
NAT 68.454 Native Health Issues	3	NATV 3240 Nat Med & Health	3	Last assessed Fall 2011
NURS 71.153 Nutrition & Health Promotion	3	HNSC 1210 Nut Hlth Lifestl	3	Last assessed Fall 2011
PHIL 70.160 Intro To Philosophy	3	PHIL 1XXX Transfer 1000 Lvl	3	Last assessed Fall 2016
PHIL 70.162 Introduction To Logic	3	PHIL 1XXX Transfer 1000 Lvl	3	Last assessed Fall 2012
PHIL 70.163 Critical Thinking	3	PHIL 1XXX Transfer 1000 Lvl	3	Last assessed Fall 2015
POL 78.130 Introduction To Politics	6	POLS 1500 Intro Politics	6	Last assessed Fall 2015
POL 78.172 Fund of Politics	3	POLS 1XXX Transfer 1000 Lvl	3	Last assessed Fall 2015
REL 86.150 What Is A Religion?	3	RLGN 1XXX Transfer 1000 Lvl	3	Last assessed Fall 2012
REL 86.157 Intro Religious Ecstasy	3	RLGN 1XXX Transfer 1000 Lvl	3	Last assessed Fall 2015

**Computer Engineering Natural Science Elective possibilities:**

Brandon University		University of Manitoba Equivalent		
Course	Credit Hrs.	Course	Credit Hrs.	Comments
GEOL 42.160 Intro To Earth Science	3	GEOL 1340 Dynamic Earth	3	Last assessed Winter 2011
BIOL 15.162 Cells, Genetics & Evolution	3	BIOL 1020 Bioprinciples	3	Last assessed Fall 2015
CHEM 18.171 Elementary Organic Chemistry	3	CHEM 1320 Intro Org Chem	3	Last assessed Winter 2011
GEOL 42.160 Intro To Earth Science	3	GEOL 1340 Dynamic Earth	3	Last assessed Winter 2011
BIOL 15.264 Medical Microbiology	3	MBIO 1220 Essential Micro	3	Last assessed Fall 2015
PHYS 74.184 Solar System Astronomy	3	PHYS 1810 Gen Astro 1	3	Last assessed Fall 2011
PHYS 74.185 The Galaxy And the Universe	3	PHYS 1820 Gen Astro 2	3	Last assessed Fall 2011
PHYS 74.275 Modern Physics	3	PHYS 2380 Quant Physics 1	3	Last assessed Fall 2014

**Biosystems Free Elective possibilities:**

(Any course of interest that has a UM equivalency can be counted as a Free Elective. The list below are courses that can be counted as free elective and a specialization in Biosystems Engineering)

Brandon University		University of Manitoba Equivalent		
Course	Credit Hrs.	Course	Credit Hrs.	Comments
BOT 14.160 Nat Resource/Primary Agric	3	AGRI 1500 Natres Ag Prod	3	Last assessed Winter 2016
CHEM 18.261 Organic Chemistry I	3	CHEM 2210 Intro Organic I	3	Last assessed Winter 2011
CHEM 18.363 Biochemistry I	3	CHEM 2360 Biochem I	3	Last assessed Fall 2013
CHEM 18.373 Biochemistry II	3	CHEM 2370 Biochem II	3	Last assessed Fall 2013
CHEM 18.451 Environmental Chemistry	3	ENVR 2550 Env Chemistry	3	Last assessed Winter 2012