Lassonde Sch	nool of E	Engineering				BSc Spe	cialised	Honours (20	)14-15)		
(no stream	m)	Communic Network		Intelligent	Systems	Interactive S		Softwa	Software Development		
Course	Cr.	Course	Cr.	Course	Cr.	Course	Cr.	Course	Cr.		
EECS1001	1 🔲	1001	1	1001	1 🔲	1001	1 🗌	1001	1 🔲		
EECS/MATH1019	3 🔲	1019	3	1019	3	1019	3	1019	3		
EECS1020	3 🔲	1020	3 🔲	1020	3 🔲	1020	3	1020	3 🔲		
EECS1030	3 🔲	1030	3 🔲	1030	3 🔲	1030	3	1030	3 🔲		
EECS2001	3 🔲	2001	3 🔲	2001	3 🔲	2001	3	2001	3		
EECS2011	3 🔲	2011	3 🔲	2011	3 🔲	2011	3	2011	3		
EECS2021	4 🔲	2021	4	2021	4	2021	4	2021	4		
EECS2041	4	2041	4	2041	4	2041	4	2041	4		
EECS2031	3 🔲	2031	3 🔲	2031	3 🔲	2031	3	2031	3 🔲		
EECS3000	3	3000	3	3000	3	3000	3	2311	3		
EECS3101	3 🔲	3101	3 🔲	3101	3 🔲	3101	3 🔲	3000	3 🔲		
EECS3215 or 3221	3	3215 or 3221	3	3215 or 3221	3	3215 or 3221	3	3101	3		
EECS3311	3 🔲	3311	3 🔲	3311	3 🔲	3311	3 🔲	3215 or 3221	3 🔲		
One of EECS3401,		One of 3401,				EECS3xxx or					
3421, 3461	3	3421, 3461	3	3401	3	4xxx	3	3311	3		
EECS3xxx	3 🔲	3213 or 3214	3 📙	EECS3xxx	3 📖	3461	3 🖳	3342	3 🖳		
		3451	4			3431	3 📖	3421	3 🖳		
								3461	3		
+EECS41xx	3 🔛	+EECS41xx	3 📙	+EECS41xx	3 🖳	+EECS41xx	3 🖳	+EECS41xx	3 🖳		
EECS4xxx	3 🔛	4084	6	4081	6	4082	6 📖	4090	6		
EECS4xxx	3 📙	4215	3 📙	4401 or 440		2 of:		4312	3 🖳		
EECS4xxx	3 🔲	4214	4 📖	4421 or 442:		4431, 4441,	e $\square$	4313	3 📖		
EECS 3 or 4xxx				3 or 4xx	x 3	4461, 4471	6				
EECS 3 or 4xxx		,									
EECS total:			65		63		<u>63</u>		<u>66</u>		
MATH1090		MATH1090	3	MATH109		MATH1090	3	MATH1090	3		
MATH1300		MATH1300	3	MATH130		MATH1300	3	MATH1300	3		
MATH1310		MATH1310	3	MATH131		MATH1310	3	MATH1310	3		
MATH1025 MATH2030		MATH1025 MATH2030	3	MATH1029 MATH2030	==	MATH1025 MATH2030	3	MATH1025 MATH2030	3		
IVIA I FIZUSU		tional credits in n							٦ 🗀		
	o addi	dional ordano III II	ion-eloo si		- iiii i i i i	ippiloubic to ear	on column	. 45070			
Non Science (Gen	neral Educ	ation) courses for	the BSc:								

* Non Science (Gen Ed)	12
**Lab courses	6 🔲
Additional courses to satisfy credit sub-totals	for B.Sc. Specialised Honours
non-CS, non-MATH	30

Additional courses to satisfy 120 credit total for B.Sc. Specialised Honours:

3xxx level and 4xxx level

120

42 🔲

<sup>+</sup> EECS/MATH4161 3.0 may not be used to satisfy this requirement.

<sup>\*</sup> Obtain a list of acceptable Lassonde Non Science courses from the Advising Centre in Room LAS 1012.

 $<sup>^{**}</sup>$  The Lab requirement must be fulfilled by taking 6 credits from the following: BIOL 1000 3.00, BIOL 1001 3.00 (or BIOL 1010 6.00), CHEM 1000 3.00, CHEM 1001 3.00, PHYS 1410 6.00 or PHYS 1420 6.00 or PHYS 1010 6.00

Lassonde Scho	ool of E					BA Spe	cialised	Honours (20	114-15)
		Communication	n	Intelligent		Interactive		Software	
(no stream)		Networks		Systems		Systems		Developmen	t
Course C	cr. 🗹	Course	Cr.	Course	Cr. 🔽	Course	Cr.	Course	Cr. 🔽
EECS1001	1 🔲	1001	1	1001	1 🔲	1001	1 🔲	1001	1
EECS/MATH1019	3 🔲	1019	3	1019	3	1019	3	1019	3
EECS1020	3 🔲	1020	3	1020	3	1020	3	1020	3
EECS1030	3 🔲	1030	3	1030	3	1030	3	1030	3
EECS2001	3 🔲	2001	3	2001	3	2001	3	2001	3
EECS2011	3 🔲	2011	3 🔲	2011	3	2011	3	2011	3
EECS2021	4 🔲	2021	4	2021	4	2021	4	2021	4
EECS2031	3 🔲	2031	3 🔲	2031	3	2031	3	2031	3
EECS2041	4 🔲	2041	4	2041	4	2041	4	2041	4
EECS3000	3 🔲	3000	3	3000	3	3000	3	2311	3
EECS3101	3 🔲	3101	3 🔲	3101	3	3101	3	3000	3
EECS3215 or 3221	<sub>3</sub> 🔲	3215 or 3221	3 $\square$	3215 or 3221	3 🔲	3215 or 3221	3 🔲	3101	3 🔲
22000210 01 0221	ĭ 🖂 l	0210 01 0221		0210 01 0221		0210 01 0221		0101	
EECS3311	3	3311	3	3311	3	3311	3	3215 or 3221	3
One of EECS3401,		One of 3401,				EECS3xxx or			
3421, 3461	3	3421, 3461	3	3401		4xxx		3311	
EECS3xxx	3 🔲	3213 or 3214	3 🖳	EECS3xxx	3	3461	3	3342	3
		3451	4 📖			3431	3		3
								3461	3
+EECS41xx	3 📙	+EECS41xx	3 📙	+EECS41xx	3 🖳	+EECS41xx	3 🔲	+EECS41xx	3 🖳
	3 🔲	4084	6 🔛	4081	6 🔛	4082	6 📖	4090	6 🔛
EECS4xxx	3 📙	4215	3 🖳	4401 or 4402	3 🔛	2 of:		4312	3 🔛
EECS4xxx	3 🖳	4214	4 📖	4421 or 4422		4431, 4441,		4313	3 🔲
	3 🔲			3 or 4xxx	3	4461, 4471	6		
EECS 3 or 4xxx		_						_	
EECS total: 6	<u>63</u>	=	65		63		<u>63</u>	=	66
MATH1090	3 🔲	MATH1090	3 🔲	MATH1090	3 🔲	MATH1090	3 🔲	MATH1090	3 🗍
MATH1300	3 🔲	MATH1300	3 🔲	MATH1300	3 🗀	MATH1300		MATH1300	3 🗍
MATH1310	3 🔲	MATH1310	3 🔲	MATH1310	3 🗀	MATH1310		MATH1310	3 🗔
MATH1025	3 🗔	MATH1025	3 🔲	MATH1025	3 🗀	MATH1025	_ =	MATH1025	3 🗀
MATH2030	3 🔲	MATH2030	3 🗍	MATH2030	3 🗔	MATH2030		MATH2030	3 🗔
	'	•	<b>ч</b> ,		·		т	,	<u> </u>
General Education 24 credits of General			nroyed U	nanities Medes	of	808C 🖂			
Reasoning, Natural						SOSC L			
level, including a mir						MODES			
and Social Science	. A <mark>maxi</mark> r	num of 9 credits in	each of th	e four areas (Hi	umanities,	NATS			
Modes of Reasoning			Science) w	ill count towards	fulfillment				
of General Education	ı requirer	nents.							
Electives:	Courses	outside major and							

Modes of Reasoning, Natural Science and Social Science) w of General Education requirements.						
Electives:	Courses outside major and other requirements	18 🔲				
Additional courses	for the BA:					
	non-CS, non-MATH	30 🔲				
	4000-level	18 🔲				
	3000+4000 level	36				
Additional courses	s to satisfy 120 credit total:	120 🔲				

<sup>+</sup> EECS/MATH4161 3.0 may not be used to satisfy this requirement.

## **Lassonde School of Engineering**

International Du	ıal Degr	ree BSc Sp	ecialised Honours	<u> 2014-</u>	15 Checklist
Course Cr.		<b>\</b>			_
EECS1001	1		Cour	ses typically	completed at
EECS/MATH1019	3			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
EECS1020	3			means	York U
EECS1030	3	H		means	BRSU (Fall)
EECS2001	3	H		means	U of C (Winter)
EECS2011	3	H		means	o or o (winter)
EECS2021	4	H			
EECS2031	3	H			
EECS2041	4	H			
German	6	$\vdash$			
lang/culture	·				
Greek	6				
lang/culture	·				
EECS3000	3				
EECS3101	3				
EECS3221 or 3215	3	$\vdash$			
EECS3311	3	$\vdash$			
EECS3421	3				
The credit count of	•	vy must be at	loast 12 00		
+EECS41xx	3		least 12.00		
EECS4088 6.0	3				
(Undergrad	•				
Thesis)	6	닏			
EECS 3 or 4xxx	3				
EECS 3 or 4xxx	3				
EECS 3 or 4xxx	3				
EECS 3 or 4xxx	3				
EECS total:	63	=			
MATH1090		3 🔲			
MATH1300		3 🔲			
MATH1310		3 🔲			
MATH1025		3 🔲			
MATH2030	3	3 🔲			
<b>NEW since 2012/13:</b>	3 addition	nal credits in n	on-EECS science subje	cts	
Non Science (Gener	al Educati	ion) courses fo	or the BSc:		
			Non Science	18	Includes the
					language
			**Lab courses	6 🦳	
Additional courses t	o satisfy		ls for B.Sc. Specialised		
			CS, non-MATH	30 🖂	
			and 4xxx level	42	
Additional courses t	o satisfy	120 credit total	for B.Sc. Specialised H		
				120	
+ EECS/MATH4161 3.0			his requirement.	101 1000 2 00	

<sup>\*\*</sup> The Lab requirement must be fulfilled by taking 6 credits from the following: BIOL 1000 3.00, BIOL 1001 3.00 (or BIOL 1010 6.00), CHEM 1000 3.00, CHEM 1001 3.00, PHYS 1410 6.00 or PHYS 1420 6.00 or PHYS 1010 6.00

Lassonde School of Engineering  BSc Degree BA Degree									
Course	Cr.		Course	Cr.					
EECS1001	1	<b>-</b>  -	1001	1 -					
EECS/MATH1019			1019	3					
EECS1020	3		1020	3 🗔					
EECS1030	3		1030	3 🔲					
EECS2001	3		2001	3					
EECS2011	3		2011	3					
EECS2021	4		2021	4					
EECS2031	3		2031	3					
EECS2041	4		2041	4					
EECS3000	3		3000	3					
EECS3101	3		3101	3 🔲					
EECS3221	3		3221	3 🔲					
EECS3311	3		3311	3 🖳					
EECS3213	3	Ш	3213	3 📙					
EECS3214	3		3214	3 📙					
EECS3421	3		3421	3 🔛					
EECS3481	3		3481	3 🔛					
EECS3482	3	Ш	3482	3					
EECS4480	3	$\sqsubseteq$	4480	3 📙					
EECS4413	3	$\sqsubseteq$	4413	3					
EECS4481	4		4481	4 📙					
EECS4482	3		4482	3					
EECS total		=	=	67					
MATH1025			MATH1025	3 🔲					
MATH1090			MATH1090	3 📙					
MATH1131			MATH1131	3 📙					
MATH1300			MATH1300	3 🔲					
MATH1310		Н	MATH1310	3 🔲					
MATH2030		Ш	MATH2030	3 📖					
*PHIL2075 o STS3500			PHIL2075 or STS3500	3					
Non Science (General	<i>)</i> 3		PHIL2075 01 3133300	3 🗀					
Education) courses for the BSc:			General Education						
*+ Non Science (Gen									
Ed)	12								
**Lab courses			See Honours BA Degree	24 📖					
Additional courses to									
non-CS, non-MATI			non-CS, non-MATH	30					
3000- and 4000-leve	el 42		4000-level	18					

<sup>\*</sup> Obtain a list of acceptable Lassonde Non Science courses from the Advising Centre in Room LAS 1012. If PHIL2075 is taken 9 credits more are required to satisfy the general education requirement.

120

**Total Credits:** 

120

<sup>+</sup> SOSC2312 9.0 or SOSC2340 9.0 are highly recommended.

 $<sup>^{**}</sup>$  The Lab requirement must be fulfilled by taking 6 credits from the following: BIOL 1000 3.00, BIOL 1001 3.00 (or BIOL 1010 6.00), CHEM 1000 3.00, CHEM 1001 3.00, PHYS 1410 6.00 or PHYS 1420 6.00 or PHYS 1010 6.00

Lassonde School of Engineering BSc Honours (2014-15)								
(no strea	m)	Communication	Communication Networks		Intelligent	Systems	Interactive	Systems
Course	Cr. V	Course	Cr.		Course	Cr. V	Course	Cr. V
EECS1001	1 🔲	1001	1		1001	1 🗀	1001	1 🗀
EECS/MATH1019	9 3 🔲	1019	3		1019	3	1019	3
EECS1020	3 🔲	1020	3		1020	3 🔲	1020	3 🔲
EECS1030	3 🗌	1030	3		1030	3 🔲	1030	3 🔲
EECS2001	3	2001	3		2001	3	2001	3 🔲
EECS2011	3	2011	3		2011	3	2011	3 🔲
EECS2021	4	2021	4		2021	4	2021	4 🔲
EECS2031	3 🖳	2031	3		2031	3 🖳	2031	3 🖳
EECS2041	4 🖳	2041	4		2041	4 📙	2041	4 🖳
EECS3000	3 📙	3000	3	Ш	3000	3 🔛	3000	3 🖳
EECS3101	3 🖳	3101	3	Щ	3101	3 🖳	3101	3 📙
EECS3221 or 321		3221 or 3215	3		3221 or 3215	3 🔛	3221 or 3215	3 📙
EECS3311	3 📖	3311	3		3311	3 🔲	3311	3 📖
One of EECS3401,	3 🗀	One of EECS3401,	2		2404	3 🗀	2424	3 🔲
3421, 3461	3 🗀	3421, 3461 3213 or 3214	3		3401	3 🗀	3431 3461	3 🗔
		3213 01 3214	3 4				3401	з 🗀
EECS4xxx	3	4084	6		4081	6 🔲	4082	6
EECS4xxx	3 🗔	4004	U		4001	0	any 2 of:	<b>О</b>
EECS4xxx	3 🗔	4214	4		4401 or 4402	3 🔲	4431, 4441,	
EECS4xxx	3 🔲	4215	3		4421 or 4422	3 🔲	4461, or 4471	6 🔲
EECS total			62			54		57
MATH1090	3 🔲	MATH1090	;	3 🔲	MATH109	00 3	MATH109	0 3
MATH1300		MATH1300		3	MATH130		MATH130	
MATH1310		MATH1310		3 🔲	MATH131		MATH131	
MATH2030		MATH2030		3	MATH203		MATH203	0 3
6 additional credi	its in non-	EECS science sub	jects.	this i	s applicable to $\epsilon$	each columi	n above	
Non Science (Ger	neral Educ	ation) courses for	the E	BSc:				

Non Science (General	Education)	courses	ior tr	ie boc.
	* Non Scie	nce (Gen	Eq)	12

\*\*Lab courses 6

Additional courses to satisfy credit sub-totals for B.Sc. Honours:

non-CS, non-MATH 30

3xxx level and 4xxx level 42

Additional courses to satisfy 120 credit total for B.Sc. Honours:

120

**NOTE.** A linear algebra course such as MATH1025 3.00 is highly recommended.

<sup>\*</sup> Obtain a list of acceptable Lassonde Non Science courses from the Advising Centre in Room LAS 1012.

 $<sup>^{**}</sup>$  The Lab requirement must be fulfilled by taking 6 credits from the following: BIOL 1000 3.00, BIOL 1001 3.00 (or BIOL 1010 6.00), CHEM 1000 3.00, CHEM 1001 3.00, PHYS 1410 6.00 or PHYS 1420 6.00 or PHYS 1010 6.00

BA Honours (2014-15)

(no stream)		Communication	Network	ks Intelligen	t Systems	Interactive S	Systems		
Course	Cr.	Course	cr. V	Course	Cr.	Course	Cr.		
EECS1001	1 🗆	1001	1	100	01 1	1001	1 🗆		
EECS/MATH1019	3 🗌	1019	3	7 10	19 3 🔲	1019	3 🔲		
EECS1020	3	1020	3	102		1020	3		
EECS1030	3 🔲	1030	3 🗆	103		1030	3 🔲		
EECS2001	3 🔲	2001	3 🗀	200	01 3 🔲	2001	3 🔲		
EECS2011	3 🔲	2011	3	20	11 3 🔲	2011	3 🔲		
EECS2021	4	2021	4	202	21 4 🔲	2021	4		
EECS2031	3 🔲	2031	3 🗆	203	31 3 🗔	2031	3 🔲		
EECS2041	4	2041	4	204	41 4	2041	4		
EECS3000	3 🔲	3000	3	300	00 3 🗌	3000	3 🔲		
EECS3101	3	3101	3	310	01 3 🗌	3101	3 🔲		
EECS3221 or 3215	5 3 🔲	3221 or 3215	3	3221 or 32	15 3 🔲	3221 or 3215	3		
EECS3311	3	3311	3	33	11 3 🗌	3311	3 🔲		
One of EECS3401,	۰ 🗀	One of EECS3401,	, _	¬		0404	. $\Box$		
3421, 3461	3 🗀	3421, 3461	3	340	01 3	3431	3 📙		
		3213 or 3214 3451	3 ∟ 4 □	-		3461	3 📖		
FFCC4yey	2 <u> </u>	3431	<b>-</b>	_		4082	6 🔲		
EECS4xxx EECS4xxx	3	4084	6	_ <b> </b> 408	31 6 🖂	any 2 of:	0		
EECS4xxx	3 🔲	4214	4	4401 or 440		4431, 4441,			
EECS4xxx	3 🔲	4215	3	4421 or 442		4461, or 4471	6		
EECS total:		4210	62	3 1 4421 01 442	54		57		
					=		=		
MATH1090	3 🗌	MATH1090	3 🗌	] MATH	1090 3	MATH109	0 3 🔲		
MATH1300	3 🗌	MATH1300	3	MATH <sup>2</sup>	1300 3	MATH130	0 3		
MATH1310	3	MATH1310	3	MATH <sup>2</sup>	1310 3	MATH131	0 3		
MATH2030	3	MATH2030	3	] MATH2	2030 3	MATH203	0 3		
approved Human Science and Sociand/or 2000-leve in each of Human Science. A maxinareas (Humanities Science and Socian	MATH2030 3								
Electives:		s outside major and er requirements	18 🗀	]					
Additional Requir	rements fo	or the Honours BA:							
		non-CS, non-MATH	30 🗆						
		4000-level	18 🗀						
		3000+4000 level	36 □						
Additional course	es to satis	fy 120 credit total:	120 🗀	]					

**NOTE.** A linear algebra course such as MATH1025 3.00 is highly recommended.

#### **Lassonde School of Engineering** iBSc Degree iBA Degree Cr. Course Course Cr. EECS1001 EECS1001 1 EECS/MATH1019 3 EECS/MATH1019 3 EECS1020 3 3 **EECS1020** 3 EECS1030 EECS1030 3 3 3 EECS2001 EECS2001 3 **EECS2011 EECS2011** 3 EECS2021 4 EECS2021 4 EECS2031 3 **EECS2031** 3 EECS2041 4 **EECS2041** EECS3000 3 EECS3000 3 EECS3101 3 EECS3101 3 3 EECS3221 or 3215 EECS3221 or 3215 3 **EECS3311** 3 EECS3311 3 One of EECS3401, 3421, One of EECS3401, 3 3 3421, 3461 3461 EECS4xxx 3 **EECS total:** 54 54 3 additional credits in non-EECS science subjects. MATH1025 3 MATH1090 3 MATH1090 3 MATH1300 3 MATH1300 3 MATH1310 3 MATH1310 3 MATH2030 3 MATH2030 3 **International Component** International Component language courses 12 to 18 language courses 18 12 international studies 18 to 12 international studies exchange term exchange term **General Education** \* Non Science (Gen Ed) 12 l 6 L 24 credits; See Honours BA. 24 \*\*Lab courses Credit Totals (120), Upper Level and Other Requirements: See the BA or BSc Honours degrees

<sup>\*</sup> Obtain a list of acceptable Lassonde Non Science courses from the Advising Centre in Room LAS 1012.

<sup>\*\*</sup> The Lab requirement must be fulfilled by taking 6 credits from the following: BIOL 1000 3.00, BIOL 1001 3.00 (or BIOL 1010 6.00), CHEM 1000 3.00, CHEM 1001 3.00, PHYS 1410 6.00 or PHYS 1420 6.00 or PHYS 1010 6.00

# LASSONDE SCHOOL – Specialized Honours BA Program in DIGITAL MEDIA Calendar Copy, 2014-15

All Degree Candidates must complete the **Program Core** below, and **ONE** of two **Streams** as described below.

The Digital Media Program **Common Core** is as follows:

- FA/DATT 1000 6.00; FA/DATT 1100 3.00; FA/DATT 2000 3.00; FA/DATT 2010 3.00; FA/DATT 2050 3.00;
   FA/DATT 2100 3.00; FA/DATT 3700 6.00;
- LE/EECS 1019 3.00; LE/EECS 1030 3.00; LE/EECS 1710 3.00; LE/EECS 1720 3.00; LE/EECS 2041 4.00;
   LE/EECS 2011 3.00; LE/EECS 4700 6.00; SC/MATH 1025 3.00;
- six credits chosen from: AP/COMN 4305 6.00, AP/COMN 4306 3.00, AP/COMN 4330 6.00, SC/STS 2010 3.00, SC/STS 2110 3.00, SC/STS 2210 3.00, SC/STS 2411 3.00, SC/STS 3170 3.00, SC/STS 3500 3.00, SC/STS 3505 3.00, SC/STS 3561 3.00, SC/STS 3600 3.00, SC/STS 3726 3.00, SC/STS 3730 3.00, SC/STS 3740 3.00, SC/STS 3750 6.00, SC/STS 3755 3.00, SC/STS 3775 3.00, SC/STS 3780 3.00, SC/STS 3790 3.00, SC/STS 3970 3.00, SC/STS 3975 3.00, SC/STS 4230 3.00;
- · six credits in the Faculty of Fine Arts (not DATT);
- six credits from: FA/DANC 1900 3.00, FA/FILM 1900 3.00, FA/MUSI 1900 3.00, FA/THEA 1900 3.00, FA/VISA 1900 3.00, FA/YSDN 1900 3.00; \*\*

**All** Specialized Honours BA degree candidates **must complete ONE of the following streams** in digital media:

#### Specialized Honours BA Program: DIGITAL MEDIA DEVELOPMENT

- · the Program Core;
- LE/EECS 2031 3.00
- SC/MATH 2565 3.00 or SC/MATH 1131 3.00;
- three credits chosen from: <u>FA/DATT 3930 3.00</u>, <u>FA/DATT 3931 3.00</u>, <u>FA/DATT 3935 3.00</u>, <u>FA/DATT 3938 3.00</u>, <u>FA/VISA 2057 3.00</u>;
- six credits chosen from: <u>LE/EECS 3214 3.00</u>, <u>LE/EECS 3421 3.00</u>, <u>LE/EECS 3431 3.00</u>, <u>LE/EECS 3461 3.00</u>:
- nine credits chosen from: LE/EECS 4413 3.00, LE/EECS 4431 3.00\*, LE/EECS 4441 3.00, LE/EECS 4441 3.00, LE/EECS 4441 3.00, LE/EECS 4471 3.00\*, LE/EECS 4491 3.00\*

#### Specialized Honours BA Program: DIGITAL MEDIA ARTS

- · the Program Core;
- LE/EECS 3461 3.00;
- six credits chosen from: <u>FA/DATT 3930 3.00</u>, <u>FA/DATT 3931 3.00</u>, <u>FA/DATT 3935 3.00</u>, <u>FA/DATT 3938 3.00</u>, <u>FA/VISA 2057 3.00</u>;
- three credits chosen from: <u>LE/EECS 4413 3.00</u>, <u>LE/EECS 4431 3.00\*</u>, <u>LE/EECS 4441 3.00</u>, <u>LE/EECS 4441 3.00</u>, <u>LE/EECS 4441 3.00\*</u>
   LE/EECS 4461 3.00, <u>LE/EECS 4471 3.00\*</u>, <u>LE/EECS 4491 3.00\*</u>
- six credits chosen from: <u>FA/DATT 4930 3.00</u>, <u>FA/DATT 4931 3.00</u>, <u>FA/DATT 4932 3.00</u>, <u>FA/DATT 4935 3.00</u>

#### Notes:

- Six credits in COMN/STS can be used to satisfy both part of the general education requirements and the six credits in COMN/STS requirement.
- Upper-level credits: a minimum of 36 credits must be at the 3000 or 4000 level, at least 18 credits of which must be at the 4000 level.
- Additional elective credits must be completed, as required, for an overall total of at least 120 credits. Some students may be required to take more than 120 credits.
- 4. \* These courses require prerequisites that are not part of the program requirements.
- \*\* These six credits can be used to satisfy the humanities area general education requirement in both FFA and LE.

### **Lassonde School of Engineering**

EECS Minor (BSc, BA). Must be paired with an honours major for a total of 120 credits

B.Sc. Degree			B.A. Degree		
Course	Cr.		Course	Cr.	
EECS/MATH 1019 EECS1710 EECS1720 EECS1030 EECS2011 At least 15 EECS credits with 2nd digit not 5; nine credits must be EECS3xxx or EECS4xxx	3 3 3 3 15		EECS/MATH 1019 EECS1710 EECS1720 EECS1030 EECS2011 At least 15 EECS credits with 2nd digit not 5; nine credits must be EECS3xxx or EECS4xxx	3 3 3 3 15	
EECS total:	30			30	
Non Science	12	See Honours BSc checklis		24	See Honours BA checklist
**Lab courses	6	See Honours BSc checklis			
totals for a B.S	c. Honou	rs:	Additional coultotals for a BA	Honours:	•

<sup>\*</sup> Obtain a list of acceptable Lassonde Non Science courses from the Advising Centre in Room LAS 1012.

Note: EECS1020 3.00 can be substituted for the pair EECS1710 3.00 and EECS1720 3.00 toward satisfying the minor requirements as long as the credit count for the minor remains 30 minimum

<sup>\*\*</sup> The Lab requirement must be fulfilled by taking 6 credits from the following: BIOL 1000 3.00, BIOL 1001 3.00 (or BIOL 1010 6.00), CHEM 1000 3.00, CHEM 1001 3.00, PHYS 1410 6.00 or PHYS 1420 6.00 or PHYS 1010 6.00

## **Lassonde School of Engineering**

		Lasson	de School of	Engineering					
B.Sc. Degree				B.A. Degree					
Course	Cr.			Course	Cr.			_	
EECS1001	1			1001	1				
EECS/MATH1019	3			1019	3				
EECS1020	3			1020	3				
EECS1030	3			1030	3				
EECS2001	3			2001	3				
EECS2011	3			2011	3				
EECS2021	4			2021	4				
EECS2031	3			2031	3				
EECS3101	3			3101	3				
EECS3221 or 3215	3			3221 or 3215	3				
EECS3311	3			3311	3				
One of EECS3401,				One of 3401, 3421,					
3421, 3461	3			3461	3				
EECS3xxx	3	Ш		3xxx	3				
EECS3xxx	3			3xxx	3	L			
EECS total:	41			EECS total:	41	=			
9 additional credits in these must be at the 2			ubject; 3 of						
MATH1090		3 🔲		MATH1090		3			
MATH1300		3 🗍		MATH1300		3 🗍			
MATH1310		3 🗍		MATH1310		3 🗍			
Non Science (General	Education)	- —	or the BSc:	General Education		3 🗀			
Non Science (General	Education	courses i	or the BSC:	24 credits of General Ed	lucati	<b>on</b> chose	n from	SOSC	
				approved Humanities, N	/lodes	of Reas	oning,	HUMA	
				Natural Science and Sc				MODES NATS	
				at the 1000 and/or 2000-		•	a	IVAIS	
* Non Science (Gen		40		minimum of six credits			ial		
Ed)		12		Humanities, Natural Sc Science. A maximum of					
				the four areas (Humanit			4011 01		
				Reasoning, Natural Scie					
				Science) will count towar			:		
				General Education requi	remer	nts.			
**Lab courses		6 🔲							
				Electives (outside EECS and	not		18		
				otherwise required)			-		
								_	
Total Credits:		90			,	90		_	

<sup>\*</sup> Obtain a list of acceptable Lassonde Non Science courses from the Advising Centre in Room LAS 1012.

<sup>\*\*</sup> The Lab requirement must be fulfilled by taking 6 credits from the following: BIOL 1000 3.00, BIOL 1001 3.00 (or BIOL 1010 6.00), CHEM 1000 3.00, CHEM 1001 3.00, PHYS 1410 6.00 or PHYS 1420 6.00 or PHYS 1010 6.00

All Engineering programs offered by EECS comprise a Common Major component, the Core, and a Common General Education (Complementary Studies) component, as described below.

#### A. Complementary Studies Requirement (General Education):

A total of 12 credits of complementary studies courses must be taken, as identified below. At least 3 of the 12 credits must be taken in the humanities or social sciences, defined by the following areas: Anthropology, Humanities, English, History, Linguistics and Languages, Philosophy, Social Science, Modes of Reasoning and Women's Studies. (Asterisked courses below are also considered to meet this requirement.)

- Entrepreneurship: SB/ENTR 3400 3.00; SB/ENTR 3600 3.00; SB/ENTR 4500 3.00; and 3 credits from Humanities/Social Sciences
- Law: Up to 9 credits of Osgoode 'Perspectives' courses; and 3 credits from Humanities/Social Sciences
- · Global Engineer: One of:
  - Languages (e.g., Arabic, Chinese, German, Hindi, Japanese, Korean, Portuguese, Spanish): 12 credits
    of languages and culture courses with the same rubric, with a minimum of 6 credits of languages skills
    and a minimum of a 3 credit culture course\*. (The culture course counts as a CEAB Humanities
    requirement.)
  - French Studies: 12-credit certificate in French or French for Business, and 3 credits from Humanities/Social Sciences. (Note; these pure language courses do not count for social science or humanities under the CEAB regulation B, therefore this option requires students to complete 15 credits instead of 12 credits.
- Public Policy: Choose one of:
  - The Canadian State and Public Administration: <u>AP/PPAS 2110 3.00</u>; AP/PPAS 3190 6.00; and 3 credits from Humanities/Social Sciences.
  - Law: AP/PPAS 2200 3.00; and two of the following: AP/PPAS 3000 3.00, AP/PPAS 3135 3.00, or AP/PPAS 3136 3.00; and 3 credits from Humanities/Social Sciences.
  - Science, Technology and Public Policy: <u>AP/PPAS 2110 3.00</u>; <u>AP/PPAS 3120 3.00</u>; <u>AP/PPAS 3122 3.00</u>; and 3 credits from Humanities/Social Sciences.
- Environmental Studies: <u>ES/ENVS 2151 3.00</u> (following on <u>ES/ENVS 2150 3.00</u>); 3 credits from Humanities/Social Sciences; and 6 credits from the areas of:
  - Environmental Management: ES/ENVS 3130 3.00; ES/ENVS 3230 3.00; ES/ENVS 3420 3.00; ES/ENVS 3430 3.00; ES/ENVS 3440 3.00; ES/ENVS 3505 3.00; ES/ENVS 3510 3.00; ES/ENVS 3520 3.00; ES/ENVS 4230 6.00; ES/ENVS 4400 3.00; ES/ENVS 4401 3.00; ES/ENVS 4402 3.00; ES/ENVS 4430 3.00; ES/ENVS 4440 3.00; ES/ENVS 4440 3.00; ES/ENVS 4440 3.00; ES/ENVS 4440 3.00; ES/ENVS 4523 3.00
  - Urban & Regional Environments: ES/ENVS 3222 3.00; ES/ENVS 3226 3.00; ES/ENVS 3230 3.00; ES/ENVS 3520 3.00; ES/ENVS 3710 3.00; ES/ENVS 3740 3.00; ES/ENVS 4210 3.00; ES/ENVS 4220 3.00; ES/ENVS 4225 3.00; ES/ENVS 4230 6.00; ES/ENVS 4440 3.00; ES/ENVS 4442 3.00; ES/ENVS 4520 3.00; ES/ENVS 4700 3.00; ES/ENVS 4800 3.00
  - Politics: ES/ENVS 3151 3.00; ES/ENVS 3160 3.00; ES/ENVS 3340 3.00; ES/ENVS 3410 3.00; ES/ENVS 3420 3.00; ES/ENVS 3510 3.00; ES/ENVS 4011 3.00; ES/ENVS 4161 3.00; ES/ENVS 4210 3.00; ES/ENVS 4312 3.00; ES/ENVS 4315 3.00; ES/ENVS 4320 3.00; ES/ENVS 4440 3.00
  - Environment & Culture: ES/ENVS 3122 3.00; ES/ENVS 3125 3.00; ES/ENVS 3150 3.00; ES/ENVS 3170 3.00; ES/ENVS 3320 3.00; ES/ENVS 4100 3.00; ES/ENVS 4140 3.00; ES/ENVS 4161 3.00; ES/ENVS 4420 3.00
- Science & Technology Studies: 6 credits from: SC/STS 2210 3.00; SC/STS 3500 3.00; SC/STS 3600 3.00; SC/STS 3726 3.00; SC/STS 3765 3.00; SC/STS 3790 3.00; and 6 credits from (counts as Humanities): SC/STS 2110 3.00; SC/STS 3170 3.00; AP/HUMA 3226 3.00; SC/STS 3561 3.00; SC/STS 3725 3.00
- General Studies: Choose 12 credits from any of the lists above, including a 3-credit Humanities/Social Sciences course.

**Co-op.** A Co-op or Internship option is highly recommended for all engineering students, but is not a degree requirement.

#### B. Major PROGRAM CORE (Common) Requirements

All Specialized Honours BEng degree candidates must complete the Engineering Program Core (60 credits):

- SC/CHEM 1100 4.00;
- LE/EECS 1011 3.00; LE/EECS 1021 3.00;
- LE/ENG 1101 4.00; LE/ENG 1102 4.00; LE/ENG 2001 3.00; LE/ENG 2003 3.00; LE/ENG 3000 3.00; LE/ENG 4000 6.00;
- ES/ENVS 2150 3.00;
- SC/MATH 1013 3.00; SC/MATH 1014 3.00; SC/MATH 1025 3.00; SC/MATH 2015 3.00; SC/MATH 2930 3.00;
- SC/PHYS 1800 3.00; SC/PHYS 1801 3.00;
- All BEng degree candidates in computer, electrical and software engineering programs must complete: LE/EECS 1028 3.00;
- All BEng degree candidates in civil, geomatics, mechanical and space engineering programs must complete: <u>LE/ESSE 1012 3.00</u>

### Engineering in EECS: 2014-15

#### **COMPUTER ENGINEERING**

- Complementary Studies;
- · The engineering Program Core;
- SC/MATH 1090 3.00;
- LE/EECS 2011 3.00; LE/EECS 2021 4.00; LE/EECS 2030 3.00; LE/EECS 2031 3.00; LE/EECS 2200 3.00; LE/EECS 2210 3.00;
- SC/PHYS 2020 3.00; SC/PHYS 2211 1.00;
- At least six additional credits from SC/BIOL 1000 3.00; SC/BIOL 1001 3.00 or SC/BIOL 1010 6.00;
   SC/CHEM 1001 3.00; SC/CHEM 2011 3.00; LE/ESSE 1011 3.00; SC/PHYS 1070 3.00; SC/PHYS 2010 3.00; SC/PHYS 2040 3.00; SC/PHYS 2060 3.00;
- LE/EECS 3101 3.00; LE/EECS 3201 4.00; LE/EECS 3213 3.00; LE/EECS 3215 4.00; LE/EECS 3221 3.00; LE/EECS 3311 3.00; LE/EECS 3451 4.00;
- Three additional credits from computer science courses at the 3000 or 4000 level;
- LE/EECS 4201 3.00, LE/EECS 4214 4.00, LE/EECS 4312 3.00,
- 12 credits from: LE/EECS 3214 3.00; LE/EECS 3431 3.00; LE/EECS 4210 3.00\*; LE/EECS 4211 3.00; LE/EECS 4215 3.00\*; LE/EECS 4313 3.00; LE/EECS 4352 3.00\*; LE/EECS 4404 3.00; LE/EECS 4421 3.00\*; LE/EECS 4421 3.00\*; LE/EECS 4421 3.00\*; LE/EECS 4431 3.00\*; LE/EECS 4441 3.00; LE/EECS 4452 3.00\*; LE/EECS 4451 3.00\*; LE
- \* These 12 credits must include at least two courses with significant laboratory experience.

#### **ELECTRICAL ENGINEERING**

- · Complementary Studies;
- · The engineering program core;
- LE/EECS 2021 4.00; LE/EECS 2030 3.00; LE/EECS 2031 3.00; LE/EECS 2200 3.00; LE/EECS 2210 3.00; LE/EECS 2602 4.00; SC/PHYS 2020 3.00; SC/PHYS 2211 1.00;
- LE/EECS 3201 4.00; LE/EECS 3215 4.00; LE/EECS 3602 4.00; LE/EECS 3603 4.00; LE/EECS 3604 4.00;
- LE/ENG 4550 3.00
- three credits chosen from: SC/CHEM 1001 3.00; SC/CHEM 2011 3.00; LE/ESSE 1011 3.00; SC/PHYS 1070 3.00; SC/PHYS 1470 3.00; SC/PHYS 2010 3.00; SC/PHYS 2040 3.00; or SC/PHYS 2060 3.00.

Options: At least 28 additional credits from the following five lists, subject to the conditions below:

- Electronics option: \*LE/EECS 3611 4.00; \*LE/EECS 4611 4.00; LE/EECS 4612 4.00; LE/EECS 4613 4.00;
   LE/EECS 4614 4.00.
- Power option: LE/EECS 4613 4.00; \*LE/EECS 4621 4.00; \*LE/EECS 4622 4.00; LE/EECS 4623 4.00.
- Communications and Signal Processing option: <u>LE/EECS 3213 3.00</u>; <u>LE/EECS 4210 3.00</u>; \*<u>LE/EECS 4214 4.00</u>; <u>LE/EECS 4215 3.00</u>; <u>LE/EECS 4452 3.00</u>; \*<u>LE/EECS 4631 4.00</u>.
- Medical and Assistive Devices option: <u>LE/EECS 3213 3.00</u>; \*<u>LE/EECS 4641 4.00</u>; \*<u>LE/EECS 4642 4.00</u>;
   LE/EECS 4643 4.00; LE/EECS 4644 4.00.
- General option: LE/EECS 3214 3.00; LE/EECS 3221 3.00; LE/EECS 3311 3.00; LE/EECS 3342 3.00; LE/EECS 3431 3.00; LE/EECS 3482 3.00; LE/EECS 4201 3.00; LE/EECS 4211 3.00; LE/EECS 4312 3.00; LE/EECS 4313 3.00; LE/EECS 4352 3.00; LE/EECS 4413 3.00; LE/EECS 4421 3.00; LE/EECS 4421 3.00; LE/EECS 4431 3.00; LE/EECS 4441 3.00; LE/EECS 4481 4.00; LE/EECS 4482 3.00.

#### Conditions

- Students selecting an option must complete at least 15 credits from a single option list (any list other than
  the "General list"), including all courses on that list with an asterisk (\*); and at least seven credits in total
  from at least two other lists (24 credits in total).
- Students not selecting an option must complete credits from at least three lists, with no more than 12 credits selected from any single list; and at least two courses marked with an asterisk (\*).
- If a student completes an option, a notation will be made on the student's transcript, indicating the option
  completed. No notation will be made for students not completing an option.
- Courses appearing on multiple lists may not be used to satisfy credit requirements simultaneously from more than one list.

#### SOFTWARE ENGINEERING

- · Complementary Studies;
- · The engineering program core;
- SC/MATH 1090 3.00;
- LE/EECS 2011 3.00; LE/EECS 2021 4.00; LE/EECS 2030 3.00; LE/EECS 2031 3.00; LE/EECS 2200 3.00; LE/EECS 2311 3.00; SC/PHYS 2020 3.00; SC/PHYS 2211 1.00;
- LE/EECS 3101 3.00; LE/EECS 3201 4.00; LE/EECS 3215 4.00; LE/EECS 3221 3.00; LE/EECS 3311 3.00; LE/EECS 3342 3.00; LE/EECS 3451 4.00;
- <u>LE/EECS 4312 3.00</u>; <u>LE/EECS 4313 3.00</u>; <u>LE/EECS 4314 3.00</u>; <u>LE/EECS 4315 3.00</u>; <u>LE/EECS 4413 3.00</u>;
   <u>LE/ENG 4550 3.00</u>;
- 12 additional credits from computer science courses at the 3000 and 4000 level. At least six of these credits
  must be from the following list: LE/EECS 3214 3.00, LE/EECS 3421 3.00, LE/EECS 3461 3.00, LE/EECS
  3481 3.00, LE/EECS 3482 3.00, LE/EECS 4214 3.00, LE/EECS 4215 3.00, LE/EECS 4411 3.00, LE/EECS
  4412 3.00, LE/EECS 4441 3.00, LE/EECS 4481 3.00, LE/EECS 4482 3.00, LE/EECS 4404 3.00
- Security Option: Students selecting the software security option must choose 4 of the following 5 courses from the list above: <u>LE/EECS 3214 3.00</u>; <u>LE/EECS 3481 3.00</u>; <u>LE/EECS 3482 3.00</u>; <u>LE/EECS 4481 4.00</u>; or <u>LE/EECS 4482 3.00</u>