

Unofficial Transcript

Name: Vishnukulasingam Kumarakulasingam
Student ID: 7289971

OEN: 336917398

Print Date: 2021-06-17
10-19

Start of Transcript

2013 Fall Term

BASc in Electrical Engineering / BSc in Computing Technology (Co-op)

Course	Description	Grade	Earned	Average	Size
CHM 1311	Principles of Chemistry	C+	3.00	5.67	393
GNG 1105	Engineering Mechanics	B+	3.00	6.23	125
ITI 1120	Introduction to Computing I	A+	3.00	6.41	107
MAT 1320	Calculus I	C	3.00	3.86	397
MAT 1341	Introduction to Linear Algebra	B+	3.00	4.72	140

TGPA	6.60 Total	Earned	GPA Units
		15.00	15.00
CGPA	6.60 Total	Earned	
		15.00	

NORTEL NETWORKS ADMISSION SCHOLARSHIP AT THE UNIVERSITY OF OTTAWA

2014 Winter Term

BASc in Electrical Engineering / BSc in Computing Technology (Co-op)

Course	Description	Grade	Earned	Average	Size
ITI 1100	Digital Systems I	A-	3.00	6.01	107
ITI 1121	Introduction to Computing II	A-	3.00	5.62	85
MAT 1322	Calculus II	F	NC	4.78	176
	Repeated course				
MAT 1348	Discrete Mathematics for Computing	B	3.00	4.05	186
PHY 1124	Fundamentals of Physics for Engineers	C+	3.00	5.65	176

TGPA	5.40 Total	Earned	GPA Units
		12.00	15.00
CGPA	6.00 Total	Earned	
		27.00	

Academic standing effective 2014-04-30: Good academic standing

2014 Spring/Summer Term

BASc in Electrical Engineering / BSc in Computing Technology (Co-op)

Course	Description	Grade	Earned	Average	Size
ELG 2901	Co-Op Work Term I	P	3.00	N/A	N/A
MAT 1322	Calculus II	A+	3.00	4.98	169
	Repeated course				

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TGPA	10.00 Total	<u>Earned</u> 6.00	<u>GPA Units</u> 3.00
CGPA	6.36 Total	33.00	

Academic standing effective 2014-08-31: Good academic standing

2014 Fall Term

**BASc in Electrical Engineering /
BSc in Computing Technology
(Co-op)**

<u>Course</u>		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
CEG	2136	Computer Architecture I	B+	3.00	6.68	114
CSI	2110	Data Structures and Algorithms	A-	3.00	6.26	90
ELG	2138	Circuit Theory I	E	NC	4.81	104
ENG	1112	Technical Report Writing	C+	3.00	6.34	96
MAT	2322	Calculus III for Engineers	B	3.00	7.61	201
MAT	2384	Ordinary Differential Equations and Numerical Methods	B	3.00	7.16	177

TGPA	6.40 Total	<u>Earned</u> 15.00	<u>GPA Units</u> 15.00
CGPA	6.38 Total	48.00	

Academic standing effective 2014-12-31: Good academic standing

2015 Winter Term

**BASc in Electrical Engineering /
BSc in Computing Technology
(Co-op)**

<u>Course</u>		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
CSI	2101	Discrete Structures	B	3.00	6.34	53
CSI	2120	Programming Paradigms	B+	3.00	6.39	93
ELG	2911	Professional Practice in Information Technology and Engineering	A-	3.00	8.46	94
PHY	2323	Electricity and Magnetism	B	3.00	6.73	84

TGPA	6.75 Total	<u>Earned</u> 12.00	<u>GPA Units</u> 12.00
CGPA	6.45 Total	60.00	

Academic standing effective 2015-04-30: Good academic standing

2015 Spring/Summer Term

**BASc in Electrical Engineering /
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Transfer units from Carleton University

<u>Course</u>	<u>Description</u>	<u>Grade</u>	<u>Earned</u>
ELG 2136	Electronics I	A-	3.00
ELG 2138	Circuit Theory I	A-	3.00
Transfer Total			6.00

TGPA	8.00 Total	6.00	6.00
CGPA	6.59 Total	66.00	

Academic standing effective 2015-08-31: Good academic standing

2015 Fall Term

BASc in Electrical Engineering / BSc in Computing Technology (Co-op)

<u>Course</u>	<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
ELG 3106	Electromagnetic Engineering	B+	3.00	8.13	60
ELG 3125	Signal and System Analysis	C+	3.00	6.33	77
ELG 3136	Electronics II	C+	3.00	6.71	56
ELG 3316	Electric Machines and Power Systems	B+	3.00	7.02	55
SEG 2105	Introduction to Software Engineering	A-	3.00	7.16	90

TGPA	6.40 Total	15.00	15.00
CGPA	6.56 Total	81.00	

Academic standing effective 2015-12-31: Good academic standing

2016 Winter Term

BASc in Electrical Engineering / BSc in Computing Technology (Co-op)

<u>Course</u>	<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
ELG 3902	Co-Op Work term III	P	3.00	N/A	N/A

TGPA	0.00 Total	3.00	0.00
CGPA	6.56 Total	84.00	

Academic standing effective 2016-04-30: Good academic standing

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2016 Spring/Summer Term

**BASc in Electrical Engineering /
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<u>Course</u>		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
CEG	3185	Introduction to Data Communications and Networking	B+	3.00	7.90	82
ELG	3126	Random Signals and Systems	A-	3.00	7.68	41
ELG	3155	Introduction to Control Systems Repeated course	F	NC	5.00	49
ELG	3175	Introduction to Communication Systems	C	3.00	7.59	39

TGPA	6.33 Total	<u>Earned</u>	<u>GPA Units</u>
CGPA	6.53 Total	9.00	9.00

Academic standing effective 2016-08-31: Good academic standing

2016 Fall Term

**BASc in Electrical Engineering /
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(Co-op)**

<u>Course</u>		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
ELG	4901	Co-Op Work IV	P	3.00	N/A	N/A

TGPA	0.00 Total	<u>Earned</u>	<u>GPA Units</u>
CGPA	6.53 Total	3.00	0.00

Academic standing effective 2017-03-14: Good academic standing

2017 Winter Term

**BASc in Electrical Engineering /
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(Co-op)**

<u>Course</u>		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
ECO	1192	Engineering Economics	A	3.00	7.51	185
ELG	2137	Circuit Theory II	B+	3.00	6.58	132
ELG	3155	Introduction to Control Systems Repeated course	A+	3.00	7.45	78
PSY	1101	Introduction to Psychology: Foundations	B	3.00	5.80	196

TGPA	8.00 Total	<u>Earned</u>	<u>GPA Units</u>
CGPA	6.71 Total	12.00	12.00

Academic standing effective 2017-05-29: Good academic standing

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2017 Spring/Summer Term

**BASc in Electrical Engineering /
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<u>Course</u>	<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
ELG 4902	Co-Op Work V	P	3.00	N/A	N/A

TGPA	0.00 Total	Earned 3.00	GPA Units 0.00
CGPA	6.71 Total	111.00	

2018 Winter Term

**BASc in Electrical Engineering /
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(Systems Engineering)
(Co-op)**

<u>Course</u>	<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
ELG 4137	Principles and Applications of VLSI Design	D+	3.00	5.98	59
ELG 4157	Modern Control Engineering	A	3.00	7.99	91
ELG 4912	Electrical Engineering Design Project: Part I	A	3.00	8.91	44

TGPA	7.00 Total	Earned 9.00	GPA Units 9.00
CGPA	6.73 Total	120.00	

Academic standing effective 2018-05-28: Good academic standing

2018 Spring/Summer Term

**BASc in Electrical Engineering /
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(Systems Engineering)
(Co-op)**

<u>Course</u>	<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
ADM 1100	Introduction to Business Management	D+	3.00	4.78	109
CSI 3131	Operating Systems	C	3.00	7.29	148
ECO 1104	Introduction to Microeconomics	B	3.00	7.20	116

TGPA	4.33 Total	Earned 9.00	GPA Units 9.00
CGPA	6.55 Total	129.00	

Academic standing effective 2018-09-28: Good academic standing

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2018 Fall Term

**BASc in Electrical Engineering /
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<u>Course</u>		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
CEG	4158	Computer Control in Robotics	C+	3.00	5.54	79
ELG	4125	Electric Power Transmission, Distribution and Utilization	B+	3.00	7.79	87
ELG	4156	Linear Systems	B	3.00	6.00	89
ELG	4913	Electrical Engineering Design Project: Part II	A	3.00	8.65	46
PHY	2333	Mechanics	D	3.00	5.22	107

TGPA	5.80 Total	<u>Earned</u> 15.00	<u>GPA Units</u> 15.00
CGPA	6.47 Total	144.00	

Academic standing effective 2019-01-24: Good academic standing

2019 Winter Term

**BASc in Electrical Engineering /
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(Co-op)**

<u>Course</u>		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
SEG	2106	Software Construction	D	NC	7.70	96
SEG	3125	Repeated course Analysis and Design of User Interfaces	B	3.00	8.47	68

TGPA	6.00 Total	<u>Earned</u> 3.00	<u>GPA Units</u> 3.00
CGPA	6.46 Total	147.00	

Academic standing effective 2019-05-24: Good academic standing

2019 Spring/Summer Term

**BASc in Electrical Engineering /
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<u>Course</u>		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
		Activities dropped			N/A	N/A

TGPA	0.00 Total	<u>Earned</u> 0.00	<u>GPA Units</u> 0.00
CGPA	6.46 Total	147.00	

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2019 Fall Term

**BASc in Electrical Engineering /
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<u>Course</u>		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
CSI	2372	Advanced Programming Concepts With C++	C	3.00	6.20	158
CSI	3120	Programming Language Concepts Repeated course	E	NC	6.66	140
PHI	2394	Scientific Thought and Social Values	A-	3.00	8.50	161

TGPA	6.00	Total	<u>Earned</u>	<u>GPA Units</u>
			6.00	6.00
CGPA	6.44	Total	153.00	

Academic standing effective 2020-01-23: Good academic standing

2020 Fall Term

**BASc in Electrical Engineering /
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(Co-op)**

<u>Course</u>		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
CSI	3120	Programming Language Concepts Repeated course	A-	3.00	8.24	174

TGPA	8.00	Total	<u>Earned</u>	<u>GPA Units</u>
			3.00	3.00
CGPA	6.47	Total	156.00	

Academic standing effective 2021-02-08: Good academic standing

2021 Winter Term

**BASc in Electrical Engineering /
BSc in Computing Technology
(Systems Engineering)
(Co-op)**

<u>Course</u>		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
ELG	4159	Integrated Control Systems	S	3.00	N/A	N/A
ELG	4177	Digital Signal Processing	A	3.00	7.11	78
SEG	2106	Software Construction Repeated course	B+	3.00	7.20	100

TGPA	8.00	Total	<u>Earned</u>	<u>GPA Units</u>
			9.00	6.00
CGPA	6.53	Total	165.00	

Degree requirements fulfilled

Academic standing effective 2021-06-10: Good academic standing

Degree(s) Granted

BSc in Computing Technology /

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Name: Vishnukulasingam Kumarakulasingam
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Bachelor of Applied Science
2021-06-07

BASc in Electrical Engineering /
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(Systems Engineering)
(Co-op)
2021-06-07

End of Transcript

Q TRANSFER CREDIT

Courses taken outside the University of Ottawa (or experience acquired) before one's admission and recognized as part of the University of Ottawa program are represented by letter « Q » in the grade column of the transcript. These courses are not included, however, in the calculation of grade point averages. Please note that credits awarded for advanced standing refer to the last program at the University of Ottawa.

X EXEMPTIONS

Exemptions from courses normally required in the program are listed on the transcript with the symbol « X » in the grade column. They do not affect the grade point average. Exemptions must normally be replaced by other courses of equivalent weight.

UNITS

A unit is defined as 12 hours of formal lectures or the equivalent.

SIZE

Number of students enrolled in the course are indicated on the transcript provided that at least six students are enrolled in the course.

DEFINITION OF AVERAGES

CGPA CUMULATIVE GRADE POINT AVERAGE
TGPA TERM GRADE POINT AVERAGE

OTHER SYMBOLS

ADD ADDITIONAL TO REQUIREMENTS (PRIOR TO SEPTEMBER 2016)
DNW SEE « ABS »
H HONOURS
HP EXTRACURRICULAR (PRIOR TO SEPTEMBER 2016)
SCO INSUFFICIENT ATTENDANCE
N/A NOT APPLICABLE
AVG AVERAGE
OEN ONTARIO EDUCATION NUMBER

LEGEND**GRADES**

A+ = 10
A = 9
A- = 8
B+ = 7
B = 6
C+ = 5
C = 4
D+ = 3
D = 2
E = 1
F = 0

SYMBOLS

ABS = ABSENT
AEC = IN PROGRESS
AUD = AUDITOR
CR = CREDITED COURSE
CTN = CONTINUING
DFR = DEFERRED
DR = DROP
EIN = FAILURE/INCOMPLETE
INC = INCOMPLETE
NC = NO CREDIT
P = PASS
S = SATISFACTORY
NS = NON SATISFACTORY