

Name: **Justin Tam** Student ID: 300026741 OEN: 243436946

Print Date: 2024-06-29

05-14

**Start of Transcript** 

2017 Fall Term

Honours BSc in Physics / **BASc in Electrical Engineering** 

#### Transfer units from Cours BI / IB Courses

TGPA		9.75 Total		Earned <b>18.00</b>	GPA Units 12.00	
Course GNG MAT MAT PHY	1106 1320 1341 1121	<u>Description</u> Fundamentals of Engineering Computation Calculus I Introduction to Linear Algebra Fundamentals of Physics I	<u>Grade</u> A+ A+ A+ A	Earned 3.00 3.00 3.00 3.00	Average 5.44 5.75 5.98 5.00	<u>Size</u> 155 221 148 39
Course CHM PHY Transfer To	1311 1122 otal	<u>Description</u> Principles of Chemistry Fundamentals of Physics II	<u>Grade</u> Q Q	Earned 3.00 3.00 <b>6.00</b>		

**CGPA** 9.75 Total 18.00

Dean's Honour List

Academic standing effective 2018-02-01: Satisfactory Cumulative Grade Point Average (CGPA)

## 2018 Winter Term

### Honours BSc in Physics / **BASc in Electrical Engineering**

<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	6.73	247
GNG	1103	Engineering Design	Α	3.00	7.15	93
ITI	1100	Digital Systems I	A-	3.00	5.91	189
MAT	1322	Calculus II	A+	3.00	5.82	209

Earned **GPA Units TGPA** 9.25 Total 12.00 12.00 **CGPA** 9.50 Total 30.00

Dean's Honour List

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



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2018 Fall Term

# Honours BSc in Physics / BASc in Electrical Engineering

<u>Course</u>		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
CEG	2136	Computer Architecture I	A+	3.00	6.09	187
ELG	2138	Circuit Theory I	A+	3.00	5.65	130
MAT	2322	Calculus III for Engineers	A+	3.00	6.28	239
MAT	2384	Ordinary Differential Equations and Numerical Methods	A+	3.00	6.92	206
PHY	2311	Waves and Optics	A-	3.00	5.62	39
PHY	2333	Mechanics	A+	3.00	5.22	107

 TGPA
 9.67
 Total
 Earned 18.00
 GPA Units 18.00

 CGPA
 9.57
 Total
 48.00

Dean's Honour List

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

2019 Winter Term

# Honours BSc in Physics / BASc in Electrical Engineering

	<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
2136	Electronics I	A+	3.00	4.98	123
2137	Circuit Theory II	Α	3.00	6.21	66
1112	Technical Report Writing	A+	3.00	6.73	99
2323	Electricity and Magnetism	A+	3.00	6.20	198
2361	Modern Physics	A+	3.00	5.75	44
	2137 1112 2323	2136 Electronics I 2137 Circuit Theory II 1112 Technical Report Writing 2323 Electricity and Magnetism	2136         Electronics I         A+           2137         Circuit Theory II         A           1112         Technical Report Writing         A+           2323         Electricity and Magnetism         A+	2136       Electronics I       A+       3.00         2137       Circuit Theory II       A       3.00         1112       Technical Report Writing       A+       3.00         2323       Electricity and Magnetism       A+       3.00	2136       Electronics I       A+       3.00       4.98         2137       Circuit Theory II       A       3.00       6.21         1112       Technical Report Writing       A+       3.00       6.73         2323       Electricity and Magnetism       A+       3.00       6.20

 TGPA
 9.80
 Total
 Earned 15.00
 GPA Units 15.00

 CGPA
 9.63
 Total
 63.00

Dean's Honour List

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

2019 Fall Term

## Honours BSc in Physics / BASc in Electrical Engineering

Course		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
CEG	3136	Computer Architecture II	В	3.00	6.52	162
ELG	3106	Electromagnetic Engineering	Α	3.00	6.33	96
ELG	3125	Signal and System Analysis	A+	3.00	6.58	75
ELG	3136	Electronics II	A-	3.00	6.58	100
MUS	1303	Materials of Music I	Α	3.00	7.44	54

 TGPA
 8.40 Total
 Total
 15.00 Total
 15.00 Total

 CGPA
 9.38 Total
 78.00 Total
 78.00 Total

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



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2020 Winter Term

Honours BSc in Ph	nysics /
<b>BASc in Electrical</b>	<b>Engineering</b>

<u>Course</u>		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
ELG	3126	Random Signals and Systems	Α	3.00	N/A	N/A
ELG	3137	Fundamentals of Semiconductor Devices	A+	3.00	N/A	N/A
ELG	3155	Introduction to Control Systems	S	3.00	N/A	N/A
ELG	3175	Introduction to Communication Systems	A+	3.00	N/A	N/A
ELG	3316	Electric Machines and Power Systems	S	3.00	N/A	N/A

The Winter 2020 course average is unavailable due to a qualitative grading option.

 TGPA
 9.67
 Total
 15.00
 GPA Units

 CGPA
 9.41
 Total
 93.00

Dean's Honour List

Academic standing effective 2020-06-08: Good academic standing

### 2020 Spring/Summer Term

# Honours BSc in Physics / BASc in Electrical Engineering

<u>Course</u>		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
HIS	2129	Technology, Society and Environment Since 1800	A-	3.00	5.77	122

 TGPA
 8.00
 Total
 GPA Units
 GPA Units

 CGPA
 9.36
 Total
 96.00

Academic standing effective 2020-09-23: Good academic standing

#### 2020 Fall Term

# Honours BSc in Physics / BASc in Electrical Engineering

Course		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
CEG	4158	Computer Control in Robotics	Α	3.00	7.96	53
ELG	4912	Electrical Engineering Design Project: Part I	A+	3.00	10.00	72
PHY	3341	Theoretical Physics	В	3.00	6.06	21
PHY	3350	Thermodynamics	B+	3.00	6.48	28
PHY	3370	Introductory Quantum Mechanics	A+	3.00	7.69	16

		<u>Earned</u>	GPA Units
TGPA	8.40 Total	15.00	15.00
CGPA	9.21 Total	111.00	

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



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2021 Winter Term

Honours BSc in Physics /
<b>BASc in Electrical Engineering</b>
(Co-op)

<u>Course</u>		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
SCI	3901	Co-op Work Term	Р	3.00	N/A	N/A

<u>Earned</u> **GPA Units TGPA** 0.00 Total 3.00 0.00

**CGPA** 9.21 Total 114.00

Dean's Honour List

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

2021 Fall Term

### Honours BSc in Physics / **BASc in Electrical Engineering** (Co-op)

<u>Course</u>		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
ELG	4156	Linear Systems	EIN	NC	6.64	78
		Repeated course				
MAT	2362	Foundations of Mathematics	EIN	NC	3.84	86
		Repeated course				

**GPA Units Earned TGPA** 0.00 Total 0.00 0.00 **CGPA** 9.21 Total 114.00

Academic standing effective 2022-01-26: Good academic standing

2022 Fall Term

#### Honours BSc in Physics / **BASc in Electrical Engineering** (Co-op)

Course		Description	Grade	Earned	Average	Size
ELG	4156	Linear Systems	A	3.00	5.16	57
		Repeated course				
MAT	2362	Foundations of Mathematics	Α	3.00	5.82	66
		Repeated course				
PHY	40061	Physics Research Project (Part 1 of 2)	CTN	NC	N/A	N/A
PHY	4370	Quantum Mechanics	В	3.00	7.15	27
PHY	4382	Introduction to Solid State Physics	B+	3.00	7.04	27

**Earned GPA Units TGPA** 7.75 Total 12.00 12.00 **CGPA** 126.00 9.05 Total

Academic standing effective 2023-01-25: Good academic standing



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2023 Winter Term

Honours BSc in Physics /
<b>BASc in Electrical Engineering</b>
(Co-op)

Course		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
ELG	2911	Professional Practice in Information Technology and	A+	3.00	9.18	103
		Engineering				
ELG	4137	Principles and Applications of VLSI Design	Α	3.00	6.67	66
ELG	4159	Integrated Control Systems	A+	3.00	5.78	81
ELG	4913	Electrical Engineering Design Project: Part II	B+	3.00	9.51	67
PHY	40062	Physics Research Project (Part 2 of 2)	A+	6.00	8.32	22

 TGPA
 9.33
 Total
 Earned 18.00
 GPA Units 18.00

 CGPA
 9.09
 Total
 144.00

Dean's Honour List

Academic standing effective 2023-05-25: Good academic standing

2023 Spring/Summer Term

Honours BSc in Physics / BASc in Electrical Engineering (Co-op)

<u>Course</u>		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
SCI	4901	Co-op Work Term	P	3.00	N/A	N/A

 TGPA
 0.00
 Total
 3.00
 GPA Units

 CGPA
 9.09
 Total
 147.00

Dean's Honour List

Academic standing effective 2023-09-19: Good academic standing

2023 Fall Term

Honours BSc in Physics / BASc in Electrical Engineering

Course		<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
JPN	1901	Introduction to Japanese I	A+	3.00	6.98	60

 TGPA
 10.00 Total
 Earned 3.00 Total
 GPA Units 3.00 GP

CGPA 9.11 Total 150.00

Academic standing effective 2024-01-24: Good academic standing



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2024 Winter Term

# Honours BSc in Physics / BASc in Electrical Engineering

	<u>Description</u>	<u>Grade</u>	<u>Earned</u>	<u>Average</u>	<u>Size</u>
4157	Modern Control Engineering	Α	3.00	9.17	64
4177	Digital Signal Processing	A-	3.00	5.55	54
3355	Statistical Thermodynamics	B+	3.00	5.56	29
4322	Biological Physics	Α	3.00	6.00	10
4390	Selected Topics in Physics Intro to Separation Methods and Nanofluidcs	A+	3.00	6.75	12
	4177 3355 4322	4157 Modern Control Engineering 4177 Digital Signal Processing 3355 Statistical Thermodynamics 4322 Biological Physics 4390 Selected Topics in Physics	4157 Modern Control Engineering A 4177 Digital Signal Processing A- 3355 Statistical Thermodynamics B+ 4322 Biological Physics A 4390 Selected Topics in Physics A+	4157         Modern Control Engineering         A         3.00           4177         Digital Signal Processing         A-         3.00           3355         Statistical Thermodynamics         B+         3.00           4322         Biological Physics         A         3.00           4390         Selected Topics in Physics         A+         3.00	4157         Modern Control Engineering         A         3.00         9.17           4177         Digital Signal Processing         A-         3.00         5.55           3355         Statistical Thermodynamics         B+         3.00         5.56           4322         Biological Physics         A         3.00         6.00           4390         Selected Topics in Physics         A+         3.00         6.75

 TGPA
 8.60 Total
 Total
 Earned 15.00
 GPA Units 15.00

 CGPA
 9.06 Total
 165.00

Dean's Honour List

Academic standing effective 2024-05-23: Good academic standing

### **Scholarships and Grants**

2017	Admissions Scholarship \$3000
2018	Merit Scholarship (Canadian citizen)
2019	Merit Scholarship
2020	(Canadian citizen) Merit Scholarship
2023	(Canadian citizen) Merit Scholarship
	(Canadian citizen)

### Degree(s) Granted

BASc in Electrical Engineering / Honours BSc in Physics (Systems Engineering) 2024-05-21 Summa Cum Laude

Honours BSc in Physics / BASc in Electrical Engineering 2024-05-21 Summa Cum Laude

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 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 = 9A- = 8 B+ = 7 B = 6C+ = 5 C = 4D+=3D = 2E = F = 0**SYMBOLS** ABS **ABSENT** = IN PROGRESS AEC **AUDITOR** AUD CREDITED COURSE CR = CTN CONTINUING DEFERRED DFR = DROP DR = FAILURE/INCOMPLETE EIN = **INCOMPLETE** INC NO CREDIT NC = Р = PASS SATISFACTORY S = NS NON SATISFACTORY