Lehigh University

Office of the Registrar

Alumni Memorial Building 27 Memorial Drive West Bethlehem, PA 18015 610-758-3199

To: Brian Loughran Tran script of: Brian Loughran

Request Number: 15710368

It is not permissible to replicate this document or forward it to any person or organization other than the identified recipient.

Statement of Authenticity

This official transcript has been transmitted electronically to the recipient, and is intended solely for use by that recipient. This transcript was requested following all applicable state and federal laws, and is the official transcript of the student identified above. Release of this record or disclosure of its contents to any third party without written consent of the record owner is prohibited.

The transcript key is the last page of this document. For transcripts prior to Fall 1981, see the 'key to grades' section for the transcript key.

If you are not the intended recipient, please notify the Lehigh University Office of the Registrar immediately at transcript@lehigh.edu or (610) 758-3201.

How to Authenticate This Official Transcript

This official transcript has been digitally signed and therefore contains special characteristics. If this document has been issued by Lehigh University, and for optimal results, we recommend that this document is viewed with the latest version of Adobe® Acrobat or Adobe® Reader; it will reveal a digital certificate that has been applied to the transcript. This digital certificate will appear in a pop-up screen or status bar on the document, display a blue ribbon, and declare that the document was certified by Lehigh University with a valid certificate issued by GeoTrust CA for Adobe®. This document certification can be validated by clicking on the Signature Properties of the document.



The blue ribbon symbol is your assurance that the digital certificate is valid, the document is authentic, and the contents of the transcript have not been altered.



If the transcript does not display a valid certification and signature message, reject this transcript immediately. An invalid digital certificate display means either the digital signature is not authentic, or the document has been altered. The digital signature can also be revoked by Lehigh University if there is cause, and digital signatures can expire. A document with an invalid digital signature display should be rejected.



Author Unknown, can have two possible meanings: The certificate is a self-signed certificate or has been issued by an unknown or untrusted certificate authority and therefore has not been trusted, or the revocation check could not complete. If you receive this message make sure you are properly connected to the internet. If you have a connection and you still cannot validate the digital certificate on-line, reject this document.

If you require further information regarding the authenticity of this transcript, you may contact the Lehigh University Office of the Registrar, transcript@lehigh.edu or (610) 758-3201.



SSN/TIN: ***-**-2427 Date of Birth: 18-JUN Date Issued: 08-NOV-2017

Record of: Brian Thomas Loughran

Page: 1

Taguad	то•	Darian	Loughran
ıssuea	T.O:	Brian	Loughran

bloughran618@gmail.com

Course Level: Undergraduate		CLID	T NO	COURGE MIMI E	CDED CDD	PTS R
Only Admit: 2013 Fall Semester		SUB	J NO.	COURSE TITLE	CRED GRD	PTS R
Program 1		Inst	titution	Information continued:		
BS in Mechanical Engineering		MATI	H 023	Calculus III	4.00 C+	9.20
College: P.C.Rossin Engrg & App	olied Sci	ME	196	Numerical Methods in ME	2.00 A-	7.40
Major : Mechanical Engineering		MECI	H 003	Fund Of Engr Mechanics	3.00 B	9.00
Minor : Business	1		Ehr	s: 15.00 GPA-Hrs: 15.00 QPts:	39.70 GPA:	2.64
Aerospace Engineering						
Aerospace Engineering		201	4 Fall S	emester		
Awarded: BS in Mechanical Engineering 22-M	Y-2017	ECO	001	Principles Of Economics	4.00 A-	14.80
College : P.C.Rossin Engrg & App		MATI	H 205	Linear Methods	3.00 A-	11.10
Major : Mechanical Engineering		ME	104	Thermodynamics I	3.00 B+	9.90
Minor : Business		MECI	H 012	MECHANICS OF MATERIALS	3.00 B	9.00
Aerospace Engineering	4 4 A	THTI	R 011	Introduction To Acting	4.00 B	12.00
Inst. Honors: Honors	# #2//		Ehr	s: 17.00 GPA-Hrs: 17.00 QPts:	56.80 GPA:	3.34
SUBJ NO. COURSE TITLE	CRED GRD	PTS R 201	5 Spring	Semester		
5050 110.			H 208	Complex Variables	3.00 B	9.00
		ME	010	Graphics For Engr Design	3.00 B-	8.10
TRANSFER CREDIT ACCEPTED BY THE INSTITUTION	1: KO	ME	021	M E Laboratory I	1.00 A-	3.70
THE THE STATE OF T	花田	ME	231	Fluid Mechanics	3.00 B	9.00
AP EXAM AP Exam Credit		MECI	H 102	Dynamics	3.00 A-	11.10
III BIAM CICATO		FOUNDPHI	L 004	Intro:Belief, Knowlegde,Acti	on 4.00 B+	13.20
MATH 021 Calculus I	4.00 TR	ASA PACK	Ehr	s: 17.00 GPA-Hrs: 17.00 QPts:	54.10 GPA:	3.18
PHY 011 INTRODUCTORY PHYSICS I	4.00 TR	1000		→ ,5*		
PHY 012 INTRO PHYSICS LAB I	1.00 TR	201	Fall S	emester		
PHY 021 INTRODUCTORY PHYSICS II	4.00 TR	BUS	125	Behavioral Skills Workshop	1.00 A-	3.70
PHY 022 INTRO PHYSICS LAB II	1.00 TR	BUS	126	Info Anal&Fin Decision Makin	ng 3.00 A	12.00
PSYC 001 INTRO TO PSYCHOLOGY	4.00 TR	ME	255	Intro To Aerospace Engineeri	ing 3.00 B+	9.90
	0.00 OPA: 0.00	ME	321	Intro To Heat Transfer	3.00 A-	11.10
EMES 10100 0111 MES 0100 &105 01	70 0211 0.00	ME	343	Control Systems	3.00 A	12.00
INSTITUTION CREDIT:		PHI	L 124	Philosophy Of Religion	4.00 B+	13.20
INDITION CREEK.			Ehr	s: 17.00 GPA-Hrs: 17.00 QPts:	61.90 GPA:	3.64
2013 Fall Semester		Dear	n's List			
CHM 030 Intro To Chemical Principle	4.00 A-	14.80				
ENGL 001 Composition And Literature	3.00 B		5 Spring	Semester		
ENGR 005 Intro To Engineering Practic	e 2.00 A	8.00 BUS	127	Info Anal Fin Decisi Making	II 3.00 B+	9.90
ENGR 010 Applied Engr Computer Method		8.00 ECE	083	Intro Electrical Engineering	3.00 A	12.00
MATH 022 Calculus II	4.00 A		162	Electrical Laboratory	1.00 A	4.00
Ehrs: 15.00 GPA-Hrs: 15.00 QPts:	55.80 GPA:	3.72	*****	******* CONTINUED ON PAGE 2	*******	*****
Dean's List						
2014 Spring Semester						
ENGL 002 Composition And Literature	II 3.00 B-	8.10				
MAT 033 Engr Materials & Processes	3.00 C	6.00				
******* CONTINUED ON NEXT COL	JMN ********	*****				



Page: 2



SSN/TIN: ***-**-2427 Date of Birth: 18-JUN Date Issued: 08-NOV-2017

Record of: Brian Thomas Loughran

Level: Undergraduate

SUBJ	NO.	COURSE TITLE	CRED GRD	PTS R
Insti	itution	Information continued:		
ME	121	M E Laboratory II	1.00 B+	3.30
ME	240	Manufacturing	3.00 B	9.00
ME	242	Mechanical Engr Systems	3.00 A	12.00
TE	211	Capstone Design Projects-1	3.00 A	12.00
	Ehrs	: 17.00 GPA-Hrs: 17.00 QPts:	62.20 GPA:	3.65
Dean'	's List		75° C	
			\$ \forall \for	
2016	Fall Se	mester	*5/	
BUS	225	Dvlp, Prod & Mkt Prod/Serv I	3.00 A-	11.10
ME	111	Professional Development	1.00 A	4.00
ME	252	Mechanical Elements	3.00 A	12.00
ME	333	Propulsion Systems	3.00 A	12.00
MECH	326	Aerodynamics	3.00 A	12.00
TE	212	Capstone Design Projects-2	2.00 A	8.00
	Ehrs	: 15.00 GPA-Hrs: 15.00 QPts:	59.10 GPA:	3.94
	's List			FOUNDED BY
		Semester	4	
	226	Dev, Prod, Mktg Prod & Srvc 1		12.00 1865
BUS		Business Strategy	1.00 B+	3.30
ME		Directed Study	3.00 A	12.00
ME		Control Systems Laboratory		8.00
		Finite Element Analysis		9.90
MECH		Fundamentals of Aircraft Des		12.00
		: 15.00 GPA-Hrs: 15.00 QPts:	57.20 GPA:	3.81
	's List	that the transfer of the second of the secon		
^ * * * *		******* TRANSCRIPT TOTALS ***		^ ^ ^ ^ ^ * * * *
mom:		Earned Hrs GPA Hrs Poi		
TOTAL	INSTIT	TUTION 128.00 128.00 446	5.80 3.49	
TOTAL	L TRANSF	TER 18.00 0.00 (0.00	
OVERA	ALL	146.00 128.00 446	5.80 3.49	
		****** END OF TRANSCRIPT ***		*****

LEHIGH UNIVERSITY

OFFICE OF THE REGISTRAR TRANSCRIPT KEY

ACCREDITATION

Lehigh University is accredited by the Middle States Association of Colleges and Schools. Specialized programs are accredited by various governing bodies.

CALENDAR

Early semester. Fall and Spring terms are 70 days of instruction and a 9 day final examination period. Summer term consists of two six week terms and one twelve week term.

UNDERGRADUATE GRADES				
GRADE	INTERPRETATION	QUALITY POINTS PER SEMESTER HOUR		
A	Excellent	4.0		
A-		3.7		
B+	Good	3.3		
В		3.0		
B-		2.7		
C+	Competent	2.3		
C		2.0		
C-	Level of Proficiency for prerequisite	1.7		
D+	Passing	1.3		
D		1.0		
D-		0.7		
F	Failing	0.0		
WF	Withdrawal beyond deadline and/or with failing performance - included in GPA			
P	Passing - assigned in pass/fail courses			
CR	Credit earned toward graduation			
NCR	No credit toward degree			
N	Incomplete			
X	Absent from final examination			
Z	Absent from final examination and Incomplete			
AU	Audit			
W	Withdrawal - after drop/add and up to 11 weeks of ser	mester		
WP	Withdrawn with passing performance at time of withdrawn			
NR	Not reported			
\$	Indicates the grade and credit related to the marked co	ourse are included in GPA,		
*	Indicates that the marked course has a grade assigned	that was incomplete and a		

grade assigned later.

GRADUATE GRA	DES
DIS	Dissertation is a notation for graduate students only of continuing registration and
	residence credit towards a Doctoral degree. Is not included in quality grade point
	averages.
MOC	Maintenance of candidacy is a notation for graduate students only of continuing registration and residency credit towards a Master's degree. Is not included in quality grade point averages.

When a course is repeated (E - exclude from GPA and hours earned or I - include in GPA and hours earned) the student will receive credit toward the degree only once. The final grade received is used in cumulative grade point average calculation. E indicates the grade is excluded from term and cumulative grade point averages.

A grade preceded by an N, X, or Z, e.g. NC-, XF or ZB indicates the lowest possible grade a student may receive after the indicated work is completed. A grade preceded by an asterisk * e.g. *F, *A- indicates the course has been completed and the notation is the final grade assigned.

Grade point averages are calculated by dividing quality points by GPA hours attempted.

Only Lehigh University courses, courses taken through the Lehigh Valley Association of Independent Colleges (LVAIC), of which Lehigh is a member, are used in computing the cumulative grade point average.

ALLN - De Sales University	MORV - Moravian College
CECR - Cedar Crest College	MUHL - Muhlenberg College
LAF - Lafayette College	

Transfer credits from other institutions are shown at the start of the transcript and are defined by the term in which Lehigh accepted the credit and the name of the other institution. Grades from all other institutions are not included in cumulative grade point averages and are designated with a TR grade.

GRADUATE GRADES

Course grades are defined as for undergraduates except that no grade lower than a C may be counted toward a graduate degree.

COURSE NUMBERING

0 - 99	Undergraduate courses, primarily for underclassmen
100 - 199	Undergraduate courses, open to freshmen by petition
200 - 299	Advanced undergraduate courses
300 - 399	Advanced undergraduate courses, open to graduates
400 - 499	Courses open to graduate students only, and undergraduates by petition

CONDITIONS FOR THE RELEASE OF TRANSCRIPTS

Transcripts are sent only upon written request of the student. Transcripts are forwarded with the understanding that they will not be released to third parties. The Family Educational Rights and Privacy Act of 1974 specifies that written consent of the student is necessary before this information may be released. If you are unable to comply with this condition, please return this material.

Release Notes: Lehigh University does not issue partial transcripts nor does the University reproduce transcripts of academic work completed at secondary schools or other post secondary institutions.

Transcript Authenticity

This document is unofficial unless the signature is rendered in white.

Lehigh University FICE Code: 003289 Lehigh University CEEB Code: 002365

Lehigh University University Phone Number: (610) 758-3000 Office of the Registrar Office of the Registrar Phone: (610) 758-3200 27 MEMORIAL DRIVE WEST Office of the Registrar Fax: (610) 758-3198

BETHLEHEM, PA 18015-3090

Questions regarding the accuracy and authenticity of this document should be brought to the attention of the University Registrar immediately.