

APPLICATION

Due: Friday, March 6th , 2015

AMERICAN CONCRETE INSTITUTE – MISSOURI CHAPTER GRADUATE SCHOLARSHIP AWARD

PERSONAL INFORMATION

NAME: Brandon M Ratermann	
ADDRESS: 98 N Clement St. PO Box 647, Aviston, IL, 62216	
TELEPHONE: 618-978-2891	EMAIL braterm@siue.edu

HIGHER EDUCATION

INSTITUTION	DATES ATTENDED	CREDIT HOURS	DEGREES AWARDED AND DATE
Kaskaskia College	8/08 – 5/10	69	Pre-Engineering
Southern Illinois University Edwardsville	5/10 – 7/12	78	Bachelors Civil Engineering Minor Mathematical Studies

GRADUATE STUDY

Institution: SIUE	Location: Edwardsville, IL
Date of Admission: 8/2014	Period of Study: 8/14 – 12/16
Degree Expected: Masters Civil Engineering	Specialization: Transportation Engineering
Previous MO-ACI graduate scholarship? Yes ☐ , No ☒ If yes, when?:	

1. **What reasons do you believe support your application for this award? (Financial need is not an important criterion.)**

I feel that I would be a respectable candidate for this award. I graduated with my bachelors in Civil Engineering in July of 2012 and have been working as an engineer since. I started Graduate school in the fall of 2014 to advance my learning and credentials as an engineer. I am an extremely hard worker and am willing to put forth the effort to achieve my goals. I hold my job, career, and education in high regard and consider myself a professional in all aspects. If I receive the award, you can count on that I will put forth the effort to meet and exceed all the goals and expectations that are asked of me. I would like to thank the scholarship committee for considering me for a potential scholarship, and that it would be an honor to represent your organization.

2. What is your background in the field of concrete? Of particular interest is your experience in design, materials, construction, and/or research. Include a summary of your work experience and accomplishments.

Concrete plays an extremely large part in our infrastructure. While working as a carpenter during high school and college, I was introduced to concrete on the construction side. We constructed concrete foundation and extensive flat work. During and after college, I became familiar with concrete in a much different light. Some of the ways that I work with concrete now are; concrete pavement condition analysis, concrete pavement design, design and inspection of concrete roadway features, design and installation of concrete pipe, and lastly performing numerous concrete tests on construction projects. Concrete products and designs play a large part in every day work as a transportation engineer.

3. What is your plan for continuing your education? What goals have you established for your education?

Currently I am working full time at the consulting firm, Oates Associates. I work as a design engineer on transportation projects in the Metro East. At work, I have been involved in all aspects of transportation design, but the areas where I have found the most interest is the traffic study and construction. The challenge of determining the problem and then developing the most efficient and sustainable solution greatly intrigues me. This is what led me to enroll last fall in the graduate program at SIUE where I am working on my Masters in Civil Engineering with a specialization in Transportation Engineering. My goals that I have set are to take my PE exam in the spring of 2016, and to complete my Masters degree in the fall of 2016. My long term career goal is to own my own firm that specializes in transportation solutions and construction for local municipalities.

4. What specific work relating to concrete, such as design, materials, construction, or research, will you pursue during your graduate work?

One of the areas that interest me while working as an engineer is pavement condition. While much of design is spent analyzing traffic patterns, there is an equal amount of time spent on pavement condition and improvements. I have done pavement studies for municipalities and in general, the concrete streets are in much better condition. I would like to take this knowledge and try to research and implement ways to make concrete streets a more viable and economic decision for local agencies. It is a goal of mine to make concrete pavement within reach for local agencies. Concrete streets require little maintenance after installation, and would free municipalities from the endless mill and overlay cycle that are HMA pavements. While in graduate school, I would have the resources to further investigate making this a reality.

5. What will your program of study be during the year of this award? (List coursework and research)

This semester I am taking a graduate course that teaches computer simulation and modeling of traffic. The programs that it teaches are the HCS 2010, Corsim, and SYNCHRO. These are industry leading programs for transportation engineers. During the summer semester I am taking a class on advanced pavement design. This class will teach how to design pavement structures to accommodate different traffic volumes or types. The types of pavement that it covers are asphalt and concrete pavements. It will also cover which pavement types are better suited for certain conditions and also how to manage pavement condition. My fall course is Transportation Safety Systems. This class will cover different ways that transportation engineers can incorporate safety into traffic designs.

REFERENCES

List the names of two people from whom you have requested recommendations be emailed or mailed to the ACI-MO Chapter at the address below.

NAME	TITLE	EMPLOYER	ADDRESS
Tom Cissell, PE	Partner	Oates Associates	100 Lanter Ct, Suite 1 Collinsville, IL 62234
Eric Hofelich	Head Pre-Engineering	Kaskaskia College	27210 College Rd, Centralia, IL 62801

I certify that the information contained in this application is true and that I have answered all of the questions to the best of my ability. I agree that I will notify the ACI Missouri Chapter immediately when my educational program is interrupted or changed in any manner that may jeopardize the intent of the award. I further agree that I will accept the award only as long as I successfully pursue the graduate study program I have described above and for which the reward was made.

Signature:  Date: 3-6-15

RETURN COMPLETED APPLICATION PACKAGE BY FRIDAY, MARCH 6TH, 2015 TO
dane.shaw@jacobs.com (PREFERED SUBMISSION METHOD)

or

Dane M. Shaw
Jacobs Engineering
501 N. Broadway
Saint Louis, MO 63102

Applicants are encouraged to submit applications electronically. Please make every attempt to submit in one email. Letters of reference should be sent directly either electronically or by mail.

Registration Status

800393622
Brandon M.
Ratermann
Spring 2015
Mar 04, 2015
01:42 pm

 **You have Holds which will prevent registration.**

 Your Academic Standing is Graduate Standing which permits registration.

 Your Student Status permits registration.

Your Class for registration purposes is Master's Candidate.

Earned Credit

Level	Type	Hours
Undergraduate	Institutional	78.000
Undergraduate	Transfer	69.000
Graduate	Institutional	3.000

Curriculum Information

Current Program

Master of Science

Level:	Graduate
Program:	Engineering - MS
Admit Term:	Fall 2014
Admit Type:	Master's
Catalog Term:	Fall 2014
College:	School of Engineering
Campus:	Edwardsville
Major and Department:	Civil Engineering, Civil Engineering
Major Concentration:	Transportation Engineering

[View Holds](#)

Academic Transcript

800393622
Brandon M.
Ratermann
Mar 04, 2015
01:44 pm

 This is not an official transcript. Courses which are in progress may also be included on this transcript.

[Transfer Credit](#) [Institution Credit](#) [Transcript Totals](#) [Courses in Progress](#)
[Transcript Data](#)

STUDENT INFORMATION

Name : Brandon M. Ratermann

Birth Date: Jun 09, 1990

Student Type: Continuing

Curriculum Information

Current Program

Master of Science

College: School of Engineering

Major and Department: Civil Engineering, Civil Engineering

Major Concentration: Transportation Engineering

***Transcript type:INTL is NOT Official ***

DEGREE INFORMATION

Denied: Bachelor of Science

Degree Date:

Curriculum Information

Primary Degree

Major: Civil Engineering

Awarded: Bachelor of Science

Degree Date: Aug 04, 2012

Curriculum Information

Primary Degree

Major: Civil Engineering

Minor: Mathematical Studies

TRANSFER CREDIT ACCEPTED BY INSTITUTION [-Top-](#)

200735: Kaskaskia College

Subject	Course	Title		Grade	Credit Hours	Quality Points		R
SPC	105	Public Speaking		(A)	3.000			0.000
		Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA	

Current Term:	3.000	3.000	3.000	0.000	0.000	0.000
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Unofficial Transcript

200815: Kaskaskia College

Subject	Course	Title	Grade	Credit Hours	Quality Points	R
N/A	0000	Not Accepted	(A)	0.000		0.000
N/A	0000	Not Accepted	(A)	0.000		0.000

	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Current Term:	0.000	0.000	0.000	0.000	0.000	0.000

Unofficial Transcript

200825: Kaskaskia College

Subject	Course	Title	Grade	Credit Hours	Quality Points	R
MATH	125	Precalculus Mathematics	(A)	3.000		0.000

	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
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Current Term:	3.000	3.000	3.000	0.000	0.000	0.000
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Unofficial Transcript

200835: Kaskaskia College

Subject	Course	Title	Grade	Credit Hours	Quality Points	R
CHEM	120A	Gen, Org, Bio Chemistry	(A)	3.000		0.000
CHEM	124A	Gen, Org, Bio Chem Lab	(A)	1.000		0.000
ECON	112	Prin Of Microeconomics	(C)	3.000		0.000
ENG	101	English Composition I	(B)	3.000		0.000
MATH	150	Calculus I	(A)	5.000		0.000
TRF	1XX	Freshman Orientation	(A)	1.000		0.000

	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
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Current Term:	16.000	16.000	16.000	0.000	0.000	0.000
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Unofficial Transcript

200915: Kaskaskia College

Subject	Course	Title	Grade	Credit Hours	Quality Points	R
ACCT	1XX	Financial Accounting	(C)	1.000		0.000
ACCT	200	Fundamentals Of Fin-	(C)	3.000		0.000
ECON	111	Prin Of Macroeconomics	(C)	3.000		0.000

ENG	102	English Composition II	(B)	3.000	0.000
MATH	152	Calculus II	(B)	4.000	0.000

		Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Current Term:		14.000	14.000	14.000	0.000	0.000	0.000

Unofficial Transcript

200935: Kaskaskia College

Subject	Course	Title	Grade	Credit Hours	Quality Points			R
CE	204	Engineering Graphics & CAD	(B)	3.000				0.000
CE	240	Statics	(A)	3.000				0.000
PHIL	106	Critical Thinking	(B)	3.000				0.000
PHIL	111	Intro To Philosophy	(A)	3.000				0.000
		Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA	
Current Term:		12.000	12.000	12.000	0.000	0.000		0.000

Unofficial Transcript

201015: Kaskaskia College

Subject	Course	Title	Grade	Credit Hours	Quality Points		R
MATH	250	Calculus III	(C)	3.000			0.000
ME	262	Dynamics	(A)	3.000			0.000
N/A	0000	Not Accepted	(S)	0.000			0.000
PHYS	151	University Physics I	(A)	4.000			0.000
PHYS	151L	University Physics I Lab	(A)	1.000			0.000
SPC	103	Interprsnl Comm Skills	(A)	3.000			0.000
TRF	1XX	Atmospheric Science	(A)	3.000			0.000
		Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Current Term:		17.000	17.000	17.000	0.000	0.000	0.000

Unofficial Transcript

201035: Kaskaskia College

Subject	Course	Title		Grade	Credit Hours	Quality Points		R
HIST	111B	Intro To Hist Of Western		(B)	3.000			0.000
HIST	1XX	History Of Western Civ		(B)	1.000			0.000
		Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA	
Current Term:		4.000	4.000	4.000	0.000	0.000		0.000

Unofficial Transcript

INSTITUTION CREDIT [-Top-](#)**Term: Summer 2010****College:** School of Engineering**Major:** Civil Engineering**Student Type:** Transfer**Academic Standing:** Good Standing

Subject	Course	Campus	Level	Title	Grade	Credit Hours	Quality Points	Start and End Dates	R	CEU Contact Hours
CE	242	Edwardsville	UG	Mechanics of Solids	B	3.000	9.000			
PHYS	152	Edwardsville	UG	University Physics II	B	4.000	12.000			
PHYS	152L	Edwardsville	UG	University Physics II Lab	B	1.000	3.000			

Term Totals (Undergraduate)

	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Current Term:	8.000	8.000	8.000	8.000	24.000	3.000
Cumulative:	8.000	8.000	8.000	8.000	24.000	3.000

Unofficial Transcript

Term: Fall 2010**College:** College of Arts and Sciences**Major:** Undeclared**Student Type:** Continuing**Academic Standing:** Good Standing

Subject	Course	Campus	Level	Title	Grade	Credit Hours	Quality Points	Start and End Dates	R	CEU Contact Hours
CE	206	Edwardsville	UG	Civil Engineering Surveying	C	2.000	4.000			
CE	207L	Edwardsville	UG	Civil Engineering Computer App	B	1.000	3.000			
CHEM	121A	Edwardsville	UG	General Chemistry	B	4.000	12.000			
CHEM	125A	Edwardsville	UG	General Chemistry Lab	B	1.000	3.000			
ECE	210	Edwardsville	UG	Circuit Analysis I	B	3.000	9.000			
ME	310	Edwardsville	UG	Thermodynamics I	B	3.000	9.000			

Term Totals (Undergraduate)

	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Current Term:	14.000	14.000	14.000	14.000	40.000	2.857

Cumulative: 22.000 22.000 22.000 22.000 64.000 2.909

Unofficial Transcript

Term: Spring 2011

College: College of Arts and Sciences

Major: Undeclared

Student Type: Continuing

Academic Standing: Good Standing

Subject	Course	Campus	Level	Title	Grade	Credit Hours	Quality Points	Start and End Dates	R	CEU Contact Hours
CE	315	Edwardsville	UG	Fluid Mechanics	B	3.000	9.000			
CE	342	Edwardsville	UG	Structural Engineering I	A	3.000	12.000			
CE	354	Edwardsville	UG	Geotechnical Engineering	B	3.000	9.000			
CE	354L	Edwardsville	UG	Geotechnical Engineering Lab	B	1.000	3.000			
CE	376	Edwardsville	UG	Transportation	A	3.000	12.000			
MATH	305	Edwardsville	UG	Differential Equations I	B	3.000	9.000			

Term Totals (Undergraduate)

	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Current Term:	16.000	16.000	16.000	16.000	54.000	3.375
Cumulative:	38.000	38.000	38.000	38.000	118.000	3.105

Unofficial Transcript

Term: Fall 2011

College: School of Engineering

Major: Civil Engineering

Student Type: Continuing

Academic Standing: Good Standing

Additional Standing: Dean's List

Subject	Course	Campus	Level	Title	Grade	Credit Hours	Quality Points	Start and End Dates	R	CEU Contact Hours
CE	330	Edwardsville	UG	Engineering Materials	A	2.000	8.000			
CE	330L	Edwardsville	UG	Engineering Materials Lab	A	1.000	4.000			
CE	343	Edwardsville	UG	Structural Engineering II	A	3.000	12.000			
CE	380	Edwardsville	UG	Environmental Engineering	B	3.000	9.000			
IS	363	Edwardsville	UG	Living Ecologically	A	3.000	12.000			

PHIL	323	Edwardsville	UG	Eng, Ethics, & professionalism	A	3.000	12.000
STAT	380	Edwardsville	UG	Statistics For Applications	A	3.000	12.000

Term Totals (Undergraduate)

	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Current Term:	18.000	18.000	18.000	18.000	69.000	3.833
Cumulative:	56.000	56.000	56.000	56.000	187.000	3.339

Unofficial Transcript

Term: Spring 2012

College:	School of Engineering
Major:	Civil Engineering
Student Type:	Continuing
Academic Standing:	Good Standing
Additional Standing:	Dean's List

Subject	Course	Campus	Level	Title	Grade	Credit Hours	Quality Points	Start and End Dates	R	CEU Contact Hours
CE	415L	Edwardsville	UG	Applied Fluid Mechanics Lab	A	1.000	4.000			
CE	455	Edwardsville	UG	Foundation Design	A	3.000	12.000			
CE	460	Edwardsville	UG	Municipal Infrs. Design	A	3.000	12.000			
CE	475	Edwardsville	UG	Transportation Planning	A	3.000	12.000			
CE	493	Edwardsville	UG	Engineering Design	B	3.000	9.000			
IME	345	Edwardsville	UG	Egning Economic Analysis	A	3.000	12.000			

Term Totals (Undergraduate)

	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Current Term:	16.000	16.000	16.000	16.000	61.000	3.813
Cumulative:	72.000	72.000	72.000	72.000	248.000	3.444

Unofficial Transcript

Term: Summer 2012

College:	School of Engineering
Major:	Civil Engineering
Student Type:	Continuing
Academic Standing:	Good Standing

Subject	Course	Campus	Level	Title	Grade	Credit Hours	Quality Points	Start and End Dates	R	CEU Contact Hours
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CE	449	Edwardsville	UG	Advanced Steel Design	A	3.000	12.000
CE	492	Edwardsville	UG	Topics in Civil Engineering	A	3.000	12.000

Term Totals (Undergraduate)

	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Current Term:	6.000	6.000	6.000	6.000	24.000	4.000
Cumulative:	78.000	78.000	78.000	78.000	272.000	3.487

Unofficial Transcript

Term: Fall 2014

College:	School of Engineering
Major:	Civil Engineering
Student Type:	SIUE Undergrad to Graduate
Academic Standing:	Graduate Standing

Subject	Course	Campus	Level	Title	Grade	Credit Hours	Quality Points	Start and End Dates	R	CEU Contact Hours
CE	476	Edwardsville	G	Traffic Studies	B	3.000	9.000			

Term Totals (Graduate)

	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Current Term:	3.000	3.000	3.000	3.000	9.000	3.000
Cumulative:	3.000	3.000	3.000	3.000	9.000	3.000

Unofficial Transcript

TRANSCRIPT TOTALS (GRADUATE) [-Top-](#)

	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Total Institution:	3.000	3.000	3.000	3.000	9.000	3.000
Total Transfer:	0.000	0.000	0.000	0.000	0.000	0.000
Overall:	3.000	3.000	3.000	3.000	9.000	3.000

Unofficial Transcript

TRANSCRIPT TOTALS (UNDERGRADUATE) [-Top-](#)

	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Total Institution:	78.000	78.000	78.000	78.000	272.000	3.487
Total Transfer:	69.000	69.000	69.000	0.000	0.000	0.000
Overall:	147.000	147.000	147.000	78.000	272.000	3.487

[Unofficial Transcript](#)**COURSES IN PROGRESS** [-Top-](#)**Term:** Spring 2015**College:** School of Engineering**Major:** Civil Engineering**Student Type:** Continuing

Subject	Course	Campus	Level	Title	Credit Hours	Start and End Dates
CE	474	Edwardsville	G	Computer Simulation in Traffic Engineering	3.000	

[Overall Financial Aid Status](#)[Financial Aid Eligibility Menu](#)

RELEASE: 8.4.1

[SITE MAP](#)