The purpose of this form is to document the set of courses that are required for a doctor of philosophy (Ph.D.) degree in Chemical, Environmental, and Materials Engineering (CEmaT). This plan of study must be approved by a supervisory committee within the first semester of admission, and prior to admission to

Step 1: Consult with your advisor to: (a) identify other suitable faculty members to constitute your supervisory committee, and (b) plan the set of courses that will constitute the coursework requirements for

Step 3: Obtain the other committee members' feedback and concurrence regarding the proposed

Step 4: Fill in the proposed courses list the plan of study form, and have your advisor check it to ensure

<text><text><text><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><text><text><text><text><text><text> The supervisory committee must have at least four members, with at least two members being Graduate Faculty members in CEmaT. The chair must be regular faculty and a member of the Graduate Faculty, and may or may not be from CEmaT. If the chair is from CEmaT and a member of the Graduate Faculty, then only one other member of the committee must be from CEmaT and a member of the Graduate Faculty.

Full Name:		
C# and CaneLink ID #:	C	5

Name	ωU	KM	<u></u>	JN										
	:													
nd Ca	neLi	nk I	D #:			С	•••		5					
SEWO	)RK		<u> </u>		~ 1				<b>T</b>			-	**	
1			Cour	rse (	Code	1	1	Cour	se Title		Credits		Year	Grad
1. 2.														
3.														
4.														
-				<b>—</b> •		!	:					1		
5.														
0. 7														
8.														
9.					<u></u>									
_														
	С	Е	Т		7	0	3	Graduate Research Se	eminar		6			
	С	E	Т		7	0	4	Graduate Teaching			3			
TUR	ES A	ND	APP	PRO	VAL	S OI	F SU	PERVISORY COMM	ITTEE					
		Т	itle					Name	Affiliation		Signature		Da	nte
udent		<u> </u>		1 .					CEmaT					
ommi	ttee (	Chai	<u>r (Ac</u>	dvis	or)				CEmaT					
mmi	ttee 1	Men	iver iber						CEINAI					
terna	$\frac{1}{1}$ Co	mmi	ittee ]	Mei	mber									
lditio	nal N	Mem	iber (	opt	ional	)								
aT Gi	adua	nte P	rogra	am l	Direc	ctor	Da	vid A. Chin	CEmaT					
rtmen	t Ch	air (	Inter	im)			Da	vid A. Chin	CEmaT					
	1.    2.    3.    4.    5.    6.    7.    8.    9.	EWORK    1.    2.    3.    4.    5.    6.    7.    8.    9.	I.  I.    2.  I.    3.  I.    4.  I.    5.  I.    6.  I.    7.  I.    8.  I.    9.  I.    I.  I.    Ident  I.    Indent  I. <td>EWORK    1.  Court    2.  Court    3.  Court    5.  Court    6.  Court    7.  Court    8.  Court    9.  Court    C  E  T    C  E  T    C  E  T    C  E  T    C  E  T    C  E  T    C  E  T    C  E  T    C  E  T    C  E  T    C  E  T    C  E  T    ATURES AND APH  Title    Ident  Ommittee Member    Ommittee Member  Ommittee Member    Other  Ommittee Member</td> <td>EWORK    1.  Course (    2.  .  .    3.  .  .  .    5.  .  .  .    6.  .  .  .    7.  .  .  .    8.  .  .  .    9.  .  .  .    1.  .  .  .  .    9.  .  .  .  .    9.  .  .  .  .    1.  .  .  .  .  .    9.  .  .  .  .  .    1.  .  .  .  .  .    1.  .  .  .  .  .  .    9.  .</td> <td>EWORK    1  Course Code    1  I  I    2.  I  I    3.  I  I  I    5.  I  I  I    6.  I  I  I    7.  I  I  I    8.  I  I  I    9.  I  I  I    I  I  I  I    9.  I  I  I    1  I  I  I    9.  I  I  I    1  I  I  I    9.  I  I  I    1  I  I  I    1  I  I  I    1  I  I  I  I    1  I  I  I  I  I    1  I  I  I  I  I    1  I  I  I  I  I  I    1  I  I</td> <td>EWORK    1  Course Code    1  I  I    2.  I  I  I    3.  I  I  I  I    5.  I  I  I  I    5.  I  I  I  I    7.  I  I  I  I    8.  I  I  I  I    9.  I  I  I  I    I  I  I  I  I    9.  I  I  I  I    I  I  I  I  I    9.  I  I  I  I    I  I  I  I  I  I    I  I  I  I  I  I  I    9.  I  I  I  I  I  I    I  I  I  I  I  I  I  I    I  I  I  I  I  <thi< th="">  I  I  I<td>EWORK    1  Course Code    1  I  I  I    2.  I  I  I  I    3.  I  I  I  I  I    5.  I  I  I  I  I    5.  I  I  I  I  I    6.  I  I  I  I  I    9.  I  I  I  I  I    9.  I  I  I  I  I    I  I  I  I  I  I    9.  I  I  I  I  I    I  I  I  I  I  I    I  I  I  I  I  I  I    9.  I  I  I  I  I  I  I    I  I  I  I  I  I  I  I    9.  I  I  I  I  I  I  <thi< th="">  I</thi<></td><td>EWORK    Course Code  Course    1  I  I  I    2  I  I  I  I    3  I  I  I  I    4  I  I  I  I    5  I  I  I  I    6  I  I  I  I    7  I  I  I  I    8  I  I  I  I    9  I  I  I  I    I  I  I  I  I    9  I  I  I  I    I  I  I  I  I    I  I  I  I  I  I    9  I  I  I  I  I    I  I  I  I  I  I    I  I  I  I  I  I    9  I  I  I  I  I    I  <thi< th="">  I  I</thi<></td><td>EWORK    Course Code    Course Title      1.    I    I    I    I      2.    I    I    I    I    I      3.    I    I    I    I    I    I      4.    I    I    I    I    I    I    I      6.    I    I    I    I    I    I    I    I      8.    I    &lt;</td><td>EWORK    Course Code    Course Title      1</td><td>EWORK    Course Code  Course Title  Credits    1.  I</td><td>EWORK    Course Code    Course Title    Credits    Term      1.    I</td><td>EWORK    Course Code    Course Title    Credits    Term    Year      1</td></thi<></td>	EWORK    1.  Court    2.  Court    3.  Court    5.  Court    6.  Court    7.  Court    8.  Court    9.  Court    C  E  T    C  E  T    C  E  T    C  E  T    C  E  T    C  E  T    C  E  T    C  E  T    C  E  T    C  E  T    C  E  T    C  E  T    ATURES AND APH  Title    Ident  Ommittee Member    Ommittee Member  Ommittee Member    Other  Ommittee Member	EWORK    1.  Course (    2.  .  .    3.  .  .  .    5.  .  .  .    6.  .  .  .    7.  .  .  .    8.  .  .  .    9.  .  .  .    1.  .  .  .  .    9.  .  .  .  .    9.  .  .  .  .    1.  .  .  .  .  .    9.  .  .  .  .  .    1.  .  .  .  .  .    1.  .  .  .  .  .  .    9.  .	EWORK    1  Course Code    1  I  I    2.  I  I    3.  I  I  I    5.  I  I  I    6.  I  I  I    7.  I  I  I    8.  I  I  I    9.  I  I  I    I  I  I  I    9.  I  I  I    1  I  I  I    9.  I  I  I    1  I  I  I    9.  I  I  I    1  I  I  I    1  I  I  I    1  I  I  I  I    1  I  I  I  I  I    1  I  I  I  I  I    1  I  I  I  I  I  I    1  I  I	EWORK    1  Course Code    1  I  I    2.  I  I  I    3.  I  I  I  I    5.  I  I  I  I    5.  I  I  I  I    7.  I  I  I  I    8.  I  I  I  I    9.  I  I  I  I    I  I  I  I  I    9.  I  I  I  I    I  I  I  I  I    9.  I  I  I  I    I  I  I  I  I  I    I  I  I  I  I  I  I    9.  I  I  I  I  I  I    I  I  I  I  I  I  I  I    I  I  I  I  I <thi< th="">  I  I  I<td>EWORK    1  Course Code    1  I  I  I    2.  I  I  I  I    3.  I  I  I  I  I    5.  I  I  I  I  I    5.  I  I  I  I  I    6.  I  I  I  I  I    9.  I  I  I  I  I    9.  I  I  I  I  I    I  I  I  I  I  I    9.  I  I  I  I  I    I  I  I  I  I  I    I  I  I  I  I  I  I    9.  I  I  I  I  I  I  I    I  I  I  I  I  I  I  I    9.  I  I  I  I  I  I  <thi< th="">  I</thi<></td><td>EWORK    Course Code  Course    1  I  I  I    2  I  I  I  I    3  I  I  I  I    4  I  I  I  I    5  I  I  I  I    6  I  I  I  I    7  I  I  I  I    8  I  I  I  I    9  I  I  I  I    I  I  I  I  I    9  I  I  I  I    I  I  I  I  I    I  I  I  I  I  I    9  I  I  I  I  I    I  I  I  I  I  I    I  I  I  I  I  I    9  I  I  I  I  I    I  <thi< th="">  I  I</thi<></td><td>EWORK    Course Code    Course Title      1.    I    I    I    I      2.    I    I    I    I    I      3.    I    I    I    I    I    I      4.    I    I    I    I    I    I    I      6.    I    I    I    I    I    I    I    I      8.    I    &lt;</td><td>EWORK    Course Code    Course Title      1</td><td>EWORK    Course Code  Course Title  Credits    1.  I</td><td>EWORK    Course Code    Course Title    Credits    Term      1.    I</td><td>EWORK    Course Code    Course Title    Credits    Term    Year      1</td></thi<>	EWORK    1  Course Code    1  I  I  I    2.  I  I  I  I    3.  I  I  I  I  I    5.  I  I  I  I  I    5.  I  I  I  I  I    6.  I  I  I  I  I    9.  I  I  I  I  I    9.  I  I  I  I  I    I  I  I  I  I  I    9.  I  I  I  I  I    I  I  I  I  I  I    I  I  I  I  I  I  I    9.  I  I  I  I  I  I  I    I  I  I  I  I  I  I  I    9.  I  I  I  I  I  I <thi< th="">  I</thi<>	EWORK    Course Code  Course    1  I  I  I    2  I  I  I  I    3  I  I  I  I    4  I  I  I  I    5  I  I  I  I    6  I  I  I  I    7  I  I  I  I    8  I  I  I  I    9  I  I  I  I    I  I  I  I  I    9  I  I  I  I    I  I  I  I  I    I  I  I  I  I  I    9  I  I  I  I  I    I  I  I  I  I  I    I  I  I  I  I  I    9  I  I  I  I  I    I <thi< th="">  I  I</thi<>	EWORK    Course Code    Course Title      1.    I    I    I    I      2.    I    I    I    I    I      3.    I    I    I    I    I    I      4.    I    I    I    I    I    I    I      6.    I    I    I    I    I    I    I    I      8.    I    <	EWORK    Course Code    Course Title      1	EWORK    Course Code  Course Title  Credits    1.  I	EWORK    Course Code    Course Title    Credits    Term      1.    I	EWORK    Course Code    Course Title    Credits    Term    Year      1

	Title	Name	Affiliation	Signature	Date
	Student		CEmaT		
1.	Committee Chair (Advisor)		CEmaT		
2.	Committee Member		CEmaT		
3.	Committee Member				
4.	External Committee Member				
5.	Additional Member (optional)				
CE	maT Graduate Program Director	David A. Chin	CEmaT		
De	partment Chair (Interim)	David A. Chin	CEmaT		

Full Name:		
C# and CaneLink ID #:	С	5

Full Nat	ne.		1110	11									
C# and	CaneL	ink II	D #:			C							
OURSEV	VORK	<u> </u>											
			Cour	se (	Code		I	Cou	rse Title	Credits	Term	Year	Grad
1.	,												
2.	,	$\left  \right $											
4													
5.	,												
6.													
7.	,												
8.	•	$\left\{ - \right\}$				-							
	,												
	C	E	T		7	0	3	Graduate Research S	eminar	6			
	C	E	1		/	0	4	Graduate Teaching		3			
Signati	IRES		Δрр	RU	WAT	S OI	F ST	PERVISORV COMM	UTTEE				
		Ti	itle	NO				Name	Affiliation	Signature		Da	ite
Stude	ent								CEmaT	21811010		21	
1. Com	nittee	Chair	r (Ac	lvis	or)				CEmaT				
2. Com	nittee	Mem	ber		- /				CEmaT				
3. Com	nittee	Mem	ber										
4. Exter	nal Co	ommi	ttee 1	Me	mber								
5. Addi	tional	Mem	ber (	opt	ional	)							
6. Addi	tional	Mem	ber (	opt	ional	)							
CET Gra	aduate	Prog	ram	Dir	ector	,	Da	vid A. Chin	CEmaT				
	ent C	hair (l	Inter	im)			Da	vid A. Chin	CEmaT				

Title	Name	Affiliation	Signature	Date
Student		CEmaT		
Committee Chair (Advisor)		CEmaT		
. Committee Member		CEmaT		
Committee Member				
External Committee Member				
5. Additional Member (optional)				
6. Additional Member (optional)				
CET Graduate Program Director	David A. Chin	CEmaT		
Department Chair (Interim)	David A. Chin	CEmaT		

# REQUIREMENTS

# COURSEWORK

## **UM Policies:**

A doctoral student must complete a minimum of 24 credits in residence at UM

Once all course and required research credit hours are completed, the student must enroll in Research in Residence status until the degree has been granted. Research in Residence status is considered full-time enrollment

Transfer credits: (1) cannot be older than 6 years, (2) must be graduate level, (3) may not have counted toward another earned degree, (4) must have grades of B or higher.

## **CEmaT Policies:**

The minimum credit requirement for the PhD is 72 credits beyond the baccalaureate degree. These credits include both non-dissertation and dissertation credits. Non-dissertation credits include course, graduate seminar, and graduate teaching credits.

## Baccalaureate degree to Ph.D

Students entering the PhD program with a baccalaureate degree, must take a minimum of 36 non-dissertation credits and 36 dissertation credits. Non-dissertation credits must include a minimum of 27 course credits, 6 gradate-seminar credits, and 3 graduate-teaching credits. At least 9 course credits must be at the 700-level in the CEmaT department or, with the permission of the supervisory committee, can be taken outside the department.

## Master's degree to PhD

Students entering the PhD program with a prior master's degree must have a minimum of 36 non-dissertation credits that count towards the PhD degree, and 36 dissertation credits. Students can petition for a maximum of 12 masters course credits to count towards the 36 post-baccalaureate non-dissertation credits. Resident non-dissertation credits must include a minimum of 15 course credits, 6 graduate-seminar credits, and 3 graduate-teaching credits At least 9 course credits must be at the 700-level in the CEmaT department or, with the permission of the supervisory committee, can be taken outside the department.

## **Teaching proficiency**

All PhD students should demonstrate teaching proficiency. This is done by being an assistant to the instructor in classes in the CEmaT department for 2-3 semesters. Typically this should be done in the 2nd year (over 2 semesters) and may extend into the 3rd year. This is a requirement of the Ph.D. degree.

# QUALIFYING EXAM AND PROPOSAL DEFENSE

# **Qualifying Exam**

The first part of qualifying exam is taken at the end of the first year of study. The qualifying exam consists of a set of written tests that cover material from the student's baccalaureate studies, as well as material from the student's first year of study. The qualifying exam will be coordinated and administered by the supervisory committee, with the following guidelines:

- Each member of the supervisory committee will prepare a test consisting of a set of questions/problems which will be administered to the student by the committee member.
- The scope of each test will be coordinated by the chair of the supervisory committee so as to minimize overlap in content.
- The student will be informed in advance of the material to be covered on each test. Normally, the material will be relevant to the student's research area.
- The format of the each test will be determined by the responsible committee member.
- Each committee member will grade their test within one week of when it is taken.
- The student is required to pass each test, with the passing score determined by the committee member administering the test.
- If the student does not pass one or more of the tests, then follow-up tests to those not passed will be administered by the corresponding committee members in the January following the first tests. If the student does not pass all the second tests, he/she will be dismissed from the program.

Last revised: 11/1/21

- All qualifying exams will be offered in a two-week window in the August following the student's admission into the program, assumed to be in the previous August.

After passing the qualifying exam, the next milestone is the dissertation proposal defense. Upon successful defense of the dissertation, the student is admitted to candidacy.

## **Proposal Defense**

The second part of the qualifying exam is the proposal defense. This is typically taken at the end of the second year. A student is admitted to candidacy after passing the proposal defense.

## PROCEDURES AND FORMS

Required forms can be found here: grad.miami.edu/policies-and-forms/forms/index.html

Transfer students are required to submit a petition for transfer of credit form. A recent official transcript from the source institution that was submitted to UM to review along with the petition for transfer of credit request.

Complete and submit the forms for Admission to Candidacy immediately after passing the Qualifying Exam with the Dissertation Proposal

Register for at least 1 credit of CET 840 in the semester in which the dissertation is defended, and again in the graduation semester.