

DUAL PHD REQUEST FORM

COMPUTATIONAL MATHEMATICS, SCIENCE AND ENGINEERING

The purpose of this form is (1) to help you plan your dual PhD in Computational Mathematics, Science and Engineering and a second subject and (2) to ensure that the Department of CMSE is aware of your intent to do so, and to make you aware of opportunities that may be available to you because of this. This form should be completed in consultation with your guidance committee during your first thesis committee meeting and returned either in person (to 1501 Engineering Building) or via email to the CMSE Graduate Director (cmsegrad@msu.edu). The requirements for a dual PhD in CMSE and a second subject are described in Section 5 of the [CMSE Graduate Handbook](#), and several of the key specific requirements are referred to below by their number in the handbook.

IMPORTANT: As described in the university guidelines on [Dual Major Doctoral Degrees](#), "All dual major doctoral degrees must be approved by the Dean of the Graduate School. A request for the dual major degree must be submitted via GradPlan within one semester following its development and within the first two years of the student's enrollment at Michigan State University." **Most critically**, the intent to receive the degree in two areas must be outlined in the guidance committee report, and the PhD Degree Plan must reflect the required standards of both departments. Approval via GradPlan must come from the Graduate Directors of both departments, the College of the student's primary graduate program and the College of Engineering, and the Dean of the Graduate School. If you have any questions about this, please contact the CMSE Graduate Director (cmsegrad@msu.edu).

In addition to the course requirements discussed in this document, please note that **students pursuing a dual PhD must have a dissertation project that significantly incorporates the practices and knowledge of both disciplines**. As such, the request for a dual PhD with CMSE must be justified during your first committee meeting, and will be evaluated annually by your thesis committee. Students whose work is deemed to be lacking sufficient aspects of their secondary field will not be allowed to receive the dual PhD.

Once this form is completed and signed, you must initiate the Dual Major Request in your GradPlan.

Student Name: [Click here to enter Student Name](#) _____

PID: [Click here to enter PID](#) _____

Student Net ID [Click here to enter NetID@msu.edu](#) _____

Current Program: [Current Program](#) _____

Dissertation advisor: [r](#) _____

Advisor Net ID: [Advisor NetID @msu.edu](#) _____

Degree Pursued (e.g., "Dual PhD in CMSE and Mathematics"):

Primary Department: [Click here to enter Primary Department](#) _____

Secondary Department: _____

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Which program is your primary affiliation? In other words, to which program were you originally admitted? (Requirement 2)

- CMSE
- Another program: [Click here to enter primary program name](#) _____

Thesis committee names, MSU email, departmental affiliation (note that there must be at least one faculty member whose tenure home is in each department involved in this dual PhD – see Requirement 6):

1. Enter Committee Chair Name Committee Chair: Name (Print)	Click to enter Department Name Department(s)	Chair NetID NetID
2. Enter Committee Name Committee Member Name	Click to enter Department Name Department	Committee Member NetID NetID
3. Enter Committee Name Committee Member Name	Click to enter Department Name Department	Committee Member NetID NetID
4. Enter Committee Name Committee Member Name	Click to enter Department Name Department	Committee Member NetID NetID
5. Enter Committee Name Committee Member Name	Click to enter Department Name Department	Committee Member NetID NetID
6. Enter Committee Name Committee Member Name	Click to enter Department Name Department	Committee Member NetID NetID

In which of the 4 core CMSE courses will you take your subject exams?

Required: 3 for CMSE as the primary program; 2 for CMSE as secondary. (Requirement 3)

- CMSE 820 – Mathematical Foundations of Data Science
- CMSE 821 – Numerical Methods for Differential Equations
- CMSE 822 – Parallel Computing
- CMSE 823 – Numerical Linear Algebra

Explain your rationale for this choice:

[Explain your rationale for this choice.](#) _____

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What other courses have you/do you plan to take to fulfill your CMSE cognate course requirement? Note: a minimum of 12 credits total (including CMSE core courses) must be computational in nature. Please list course number, course name, and credits

(Requirement 4):

If CMSE is not your primary department, please briefly describe your department's comprehensive exam requirement (Requirement 7):

If CMSE is not your primary department, description of your department's comprehensive exam requirements.

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Students who pursue a dual PhD are working at the boundary of two disciplines, and to receive a dual PhD your research must significantly incorporate the practices and knowledge of both disciplines. Explain how your dissertation research significantly incorporates aspects of both Computational Mathematics, Science and Engineering and a second discipline¹:

¹If you have questions about this, consult the CMSE graduate director (cmsegrad@msu.edu).

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- Attach a summary of your Individual Development Plan to this form** (<http://caff.e.grd.msu.edu/IDP>)
(Required for all CMSE doctoral students AND dual CMSE students)

Additional Notes:

Click or tap here to enter text.

Student Signature: _____ Date: _____

Advisor Signature: _____ Date: _____

Secondary Advisor Signature: _____ Date: _____
(2nd advisor optional)

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Committee Members Approval (excluding advisor)²:

Name (Print)	Signature	Date
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Name (Print)	Signature	Date
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Name (Print)	Signature	Date
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Name (Print)	Signature	Date
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Name (Print)	Signature	Date
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Graduate Director of other department²:

Name (Print)	Signature	Date
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Graduate Secretary of other department:

Name (Print)	Email	Phone
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Upon completion of this form, please return to the CMSE Graduate Secretary and Graduate Director via email at cmsegrad@msu.edu or in hard copy to Room 1501, Engineering Building, for final review and the CMSE Graduate Director's signature.

CMSE Graduate Director:

Brian O'Shea

CMSE Graduate Director	Signature	Date
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²An email to cmsegrad@msu.edu will be accepted in lieu of signature(s) on the paper copy of this form for any member of the committee or the graduate director of the non-CMSE department