

Graduate Council Curriculum Committee
February 20, 2012
12:00 p.m., MH 395

Agenda

1. Welcome and call to order.
2. Review minutes from last meeting.
3. Resolution in recognition of Patricia Bishop

These items were tabled at the last meeting (4-10)

4. Inactivation of the MSME Computer-Aided Mechanical Engineering track, CECS
5. Inactivation of the MSME Miniature Engineering Systems track, CECS
6. Inactivation of the MSME Professional track, CECS
7. Inactivation of the HVAC Engineering Certificate, CECS
8. Inactivation of the CAD/CAM Technology Certificate, CECS
9. Revisions to the MS in Aerospace Engineering, CECS
10. Revisions to the MSME Mechanical Systems track, CECS

11. Revisions to the MS Mathematical Science, Industrial Math Track, COS

12. Revisions to the MFA Emerging Media, Dig Media track, CAH
13. Revisions to the MA Digital Media, Vis Lang& Inter. Media track, CAH

14. Review of Graduate Courses Not Offered for 5 years (**Tabled at last meeting.**)

15. Courses and special topics

16. Adjournment

Members of the Graduate Council Curriculum Committee:

Tosha Dupras, COS
Cristina Fernandez-Valle, COM
Charles Kelliher, CBA
Kerry Purmzensky, CAH
Art Weeks, CECS
Deborah Breiter, RCHM
Naim Kapucu, COHPA
Joyce Nutta, CED
Terrie Sypolt, LIB
Julee Waldrop, CON
Boris Zeldovich, COP
Jay Jay Stroup, GSA
Ross Hinkle, EX Officio
Max Poole, CGS Liaison



Program Recommendation Form

This form is to be used to revise, add, suspend, or delete degree programs, tracks, or certificate programs. If there are changes to a program and the changes will affect the program tracks also, one form may be used for this type of change.

PLEASE NOTE: The deadline for new tracks or certificates is **February 1 of each year**. Any proposal for new tracks or certificates received after this date will not be included in the next year's catalog. Revisions to existing programs, tracks, or certificates are **due by March 15**. Any proposals for revisions received after that date will not be included in the next year's catalog. Please include catalog copy (description, curriculum, contact information, application requirements, and application deadlines). For revisions – attach the catalog copy showing changes (use **Track Changes in Word**).

College/Unit(s) Submitting Proposal: _____

Proposed Effective Term/Year: _____

Unit(s) Housing Program: _____

Name of program, track and/or certificate: _____

Brief description of program (this description will show up in the graduate catalog copy): *Do not add complete catalog copy here.*

DELIVERY - Will program be delivered: ☐ Face to face ☐ Completely online ☐ Mixed delivery

Admissions deadlines: (Please specify if you have a different deadline for the track than for the program?)

Application requirements: (Please specify if you have different application requirements for the track than for the program? Will you admit directly to the track?)

Program Director(s) and contact information: (name, email, phone, campus address, program website address)

Please check one: this action affects a: ☐ Program ☐ Track ☐ Certificate

Please check one: this action is a(n):

- ☐ Addition. Please proceed to Part A.
- ☐ Revision. If a revision applies to multiple tracks, please list them here and then proceed to Part A:

-
- ☐ Inactivation
- ☐ Temporary Suspension of Admissions. Give Length of Suspension:
-

Temporary suspension of admissions: The program will be removed from the online application. A notation will be entered in the graduate catalog indicating the length of the suspension of admissions. Currently enrolled students will not experience any issues with continued enrollment.

Inactivation: Admissions will be suspended for new students and the program will be removed from the online application. Students active in the program are eligible to complete the program under the appropriate criteria and an appropriate teach-out plan is required. The program will be removed from the catalog as of the approved term.

If you checked inactivation or you are temporarily suspending admissions, please go to Part B and complete it.

Signature Page

RECOMMENDATIONS

<input type="checkbox"/> Yes	<input type="checkbox"/> No	Department Chair: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	College Curriculum Committee Chair: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	College Dean: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Chair or GSC: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Dean, College of Graduate Studies: _____	Date: _____

APPROVAL

Provost and Executive Vice President: _____ Date: _____

Distribution: After approval is received from the Provost, distribution will be to:

Department(s); College; Registrar; Associate Registrar; Institutional Research; Academic Services; Faculty Senate;
University Analysis and Planning Support; College of Graduate Studies

Part A – For additions or revisions of programs, tracks or certificates

Brief statement of rationale: (Please indicate the rationale, how it affects the unit and faculty teaching in and students enrolled in the program, track or certificate.)

For Revisions:

Brief listing of Program Changes: (Please indicate the changes in bullet format. If there are changes to the credit hours of the program, required courses or other requirements, please state those changes. **Remember to attach the catalog copy showing changes, using Track Changes in Word.**)

Will students be moved from an existing program, track, or certificate into this new program, track, or certificate?

☐ Yes ☐ No

If yes, state the name of the program or track where students are currently enrolled and provide a list of students if possible:

Will students have the option to stay in their existing program, track, or certificate? ☐ Yes ☐ No

Name Change

Are you changing the name of an existing program, track, or certificate? ☐ Yes ☐ No

If yes, provide the new name of the program, track, or certificate:

Provide the name of the current program, track, or certificate:

When is the name change effective? Please note: A name change will apply to the record of all students who are currently enrolled, readmitted or newly admitted into this program as of the effective date of this change.

Will students have the option to stay in their existing program, track, or certificate? ☐ Yes ☐ No

If you are requesting a CIP Code change for an existing program, track, or certificate, please provide:

old CIP:

new CIP:

If a name change is your only revision, stop here. Otherwise, complete the rest of Part A.

Part A - Continued

Specify the faculty who will participate in the program, track or certificate and their credentials to do so: (List faculty and a brief paragraph of their credentials.)

Impact of changes on students: Will current students be impacted by the addition or revision of a program, track or certificate? If so, how?

If applicable, provide a written agreement (email is fine) from all involved units that they are in support of, will provide courses to, or will participate in the program, track, or certificate. Please attach the correspondence and also list the units here.

If an addition, provide a statement of who is likely to enroll and why. Please state if there is licensure or certification that depends upon this education, etc. Also, complete the following table.

	Year 1	Year 2	Year 3
Headcount			
SCHs			

If an addition, indicate likely career or student outcomes upon completion: (What will students do? What will their job titles be?)

Part A - Continued

If an addition or there are substantial REVISIONS to existing tracks or certificates, please complete the following table on financial support: (Specify all forms of support – assistantships, fellowships, and tuition remission.)

	No. assistantship students	Source of funds	No. fellowship students (specify fellowship)	No. tuition remissions	Source of funds
Year 1					
Year 2					
Year 3					

Checklist of items to be provided:

- ☐ Electronic graduate catalog copy for additions; track changes included if there are revisions. (required)
- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ Emails showing consultation with other units. (if applicable)
- ☐ If an addition, list of 1-3 students and 1-3 faculty for profiles in the graduate catalog (provide email address so Graduate Studies can contact them to write profiles and take photos). You may provide draft copy of profiles if you wish.
- ☐ If an addition, what disciplines does this program, track or certificate belong to? What other UCF graduate programs, tracks, or certificates are related to it? This information will be used to provide additional links for prospective students to search in the online graduate catalog.

Part B – For inactivations or suspensions of programs, tracks, or certificates

Are students currently enrolled in the program? ☐ Yes ☐ No

If yes, number of current students:

Please specify the intended time period of inactivation or suspension:

If program, track, or certificate is being inactivated or suspended, then attach a “teach out” plan for all current students specifying how they can finish the program or where students will be placed if moving to another program. The “teach out” plan should specify when courses will be offered to enable students to finish. Specify whether students will remain in the existing program to finish, and if so, when the completion date will be, whether students will be moved to another program, etc. Please provide a list of students where applicable.

Sample teach out plan: Enter the terms and courses that will be taught for each term throughout the last semester. **Please delete course prefixes and numbers in this section if no teach out plan is required.**

Fall 2010	Spring 2011	Summer 2011	Fall 2011	Spring 2012

Checklist of items to be provided:

- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ E-mails showing consultation with other units. (if applicable)



Program Recommendation Form

This form is to be used to revise, add, suspend, or delete degree programs, tracks, or certificate programs. If there are changes to a program and the changes will affect the program tracks also, one form may be used for this type of change.

PLEASE NOTE: The deadline for new tracks or certificates is **February 1 of each year**. Any proposal for new tracks or certificates received after this date will not be included in the next year's catalog. Revisions to existing programs, tracks, or certificates are **due by March 15**. Any proposals for revisions received after that date will not be included in the next year's catalog. Please include catalog copy (description, curriculum, contact information, application requirements, and application deadlines). For revisions – attach the catalog copy showing changes (use **Track Changes in Word**).

College/Unit(s) Submitting Proposal: _____

Proposed Effective Term/Year: _____

Unit(s) Housing Program: _____

Name of program, track and/or certificate: _____

Brief description of program (this description will show up in the graduate catalog copy): *Do not add complete catalog copy here.*

DELIVERY - Will program be delivered: ☐ Face to face ☐ Completely online ☐ Mixed delivery

Admissions deadlines: (Please specify if you have a different deadline for the track than for the program?)

Application requirements: (Please specify if you have different application requirements for the track than for the program? Will you admit directly to the track?)

Program Director(s) and contact information: (name, email, phone, campus address, program website address)

Please check one: this action affects a: ☐ Program ☐ Track ☐ Certificate

Please check one: this action is a(n):

- ☐ Addition. Please proceed to Part A.
- ☐ Revision. If a revision applies to multiple tracks, please list them here and then proceed to Part A:

-
- ☐ Inactivation
- ☐ Temporary Suspension of Admissions. Give Length of Suspension:
-

Temporary suspension of admissions: The program will be removed from the online application. A notation will be entered in the graduate catalog indicating the length of the suspension of admissions. Currently enrolled students will not experience any issues with continued enrollment.

Inactivation: Admissions will be suspended for new students and the program will be removed from the online application. Students active in the program are eligible to complete the program under the appropriate criteria and an appropriate teach-out plan is required. The program will be removed from the catalog as of the approved term.

If you checked inactivation or you are temporarily suspending admissions, please go to Part B and complete it.

Signature Page

RECOMMENDATIONS

<input type="checkbox"/> Yes	<input type="checkbox"/> No	Department Chair: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	College Curriculum Committee Chair: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	College Dean: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Chair or GSC: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Dean, College of Graduate Studies: _____	Date: _____

APPROVAL

Provost and Executive Vice President: _____ Date: _____

Distribution: After approval is received from the Provost, distribution will be to:

Department(s); College; Registrar; Associate Registrar; Institutional Research; Academic Services; Faculty Senate;
University Analysis and Planning Support; College of Graduate Studies

Part A – For additions or revisions of programs, tracks or certificates

Brief statement of rationale: (Please indicate the rationale, how it affects the unit and faculty teaching in and students enrolled in the program, track or certificate.)

For Revisions:

Brief listing of Program Changes: (Please indicate the changes in bullet format. If there are changes to the credit hours of the program, required courses or other requirements, please state those changes. **Remember to attach the catalog copy showing changes, using Track Changes in Word.**)

Will students be moved from an existing program, track, or certificate into this new program, track, or certificate?

☐ Yes ☐ No

If yes, state the name of the program or track where students are currently enrolled and provide a list of students if possible:

Will students have the option to stay in their existing program, track, or certificate? ☐ Yes ☐ No

Name Change

Are you changing the name of an existing program, track, or certificate? ☐ Yes ☐ No

If yes, provide the new name of the program, track, or certificate:

Provide the name of the current program, track, or certificate:

When is the name change effective? Please note: A name change will apply to the record of all students who are currently enrolled, readmitted or newly admitted into this program as of the effective date of this change.

Will students have the option to stay in their existing program, track, or certificate? ☐ Yes ☐ No

If you are requesting a CIP Code change for an existing program, track, or certificate, please provide:

old CIP:

new CIP:

If a name change is your only revision, stop here. Otherwise, complete the rest of Part A.

Part A - Continued

Specify the faculty who will participate in the program, track or certificate and their credentials to do so: (List faculty and a brief paragraph of their credentials.)

Impact of changes on students: Will current students be impacted by the addition or revision of a program, track or certificate? If so, how?

If applicable, provide a written agreement (email is fine) from all involved units that they are in support of, will provide courses to, or will participate in the program, track, or certificate. Please attach the correspondence and also list the units here.

If an addition, provide a statement of who is likely to enroll and why. Please state if there is licensure or certification that depends upon this education, etc. Also, complete the following table.

	Year 1	Year 2	Year 3
Headcount			
SCHs			

If an addition, indicate likely career or student outcomes upon completion: (What will students do? What will their job titles be?)

Part A - Continued

If an addition or there are substantial REVISIONS to existing tracks or certificates, please complete the following table on financial support: (Specify all forms of support – assistantships, fellowships, and tuition remission.)

	No. assistantship students	Source of funds	No. fellowship students (specify fellowship)	No. tuition remissions	Source of funds
Year 1					
Year 2					
Year 3					

Checklist of items to be provided:

- ☐ Electronic graduate catalog copy for additions; track changes included if there are revisions. (required)
- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ Emails showing consultation with other units. (if applicable)
- ☐ If an addition, list of 1-3 students and 1-3 faculty for profiles in the graduate catalog (provide email address so Graduate Studies can contact them to write profiles and take photos). You may provide draft copy of profiles if you wish.
- ☐ If an addition, what disciplines does this program, track or certificate belong to? What other UCF graduate programs, tracks, or certificates are related to it? This information will be used to provide additional links for prospective students to search in the online graduate catalog.

Part B – For inactivations or suspensions of programs, tracks, or certificates

Are students currently enrolled in the program? ☐ Yes ☐ No

If yes, number of current students:

Please specify the intended time period of inactivation or suspension:

If program, track, or certificate is being inactivated or suspended, then attach a “teach out” plan for all current students specifying how they can finish the program or where students will be placed if moving to another program. The “teach out” plan should specify when courses will be offered to enable students to finish. Specify whether students will remain in the existing program to finish, and if so, when the completion date will be, whether students will be moved to another program, etc. Please provide a list of students where applicable.

Sample teach out plan: Enter the terms and courses that will be taught for each term throughout the last semester. **Please delete course prefixes and numbers in this section if no teach out plan is required.**

Fall 2010	Spring 2011	Summer 2011	Fall 2011	Spring 2012

Checklist of items to be provided:

- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ E-mails showing consultation with other units. (if applicable)



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College/Unit(s) Submitting Proposal: _____

Proposed Effective Term/Year: _____

Unit(s) Housing Program: _____

Name of program, track and/or certificate: _____

Brief description of program (this description will show up in the graduate catalog copy): *Do not add complete catalog copy here.*

DELIVERY - Will program be delivered: ☐ Face to face ☐ Completely online ☐ Mixed delivery

Admissions deadlines: (Please specify if you have a different deadline for the track than for the program?)

Application requirements: (Please specify if you have different application requirements for the track than for the program? Will you admit directly to the track?)

Program Director(s) and contact information: (name, email, phone, campus address, program website address)

Please check one: this action affects a: ☐ Program ☐ Track ☐ Certificate

Please check one: this action is a(n):

- ☐ Addition. Please proceed to Part A.
- ☐ Revision. If a revision applies to multiple tracks, please list them here and then proceed to Part A:

-
- ☐ Inactivation
- ☐ Temporary Suspension of Admissions. Give Length of Suspension:
-

Temporary suspension of admissions: The program will be removed from the online application. A notation will be entered in the graduate catalog indicating the length of the suspension of admissions. Currently enrolled students will not experience any issues with continued enrollment.

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If you checked inactivation or you are temporarily suspending admissions, please go to Part B and complete it.

Signature Page

RECOMMENDATIONS

<input type="checkbox"/> Yes	<input type="checkbox"/> No	Department Chair: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	College Curriculum Committee Chair: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	College Dean: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Chair or GSC: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Dean, College of Graduate Studies: _____	Date: _____

APPROVAL

Provost and Executive Vice President: _____ Date: _____

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Part A – For additions or revisions of programs, tracks or certificates

Brief statement of rationale: (Please indicate the rationale, how it affects the unit and faculty teaching in and students enrolled in the program, track or certificate.)

For Revisions:

Brief listing of Program Changes: (Please indicate the changes in bullet format. If there are changes to the credit hours of the program, required courses or other requirements, please state those changes. **Remember to attach the catalog copy showing changes, using Track Changes in Word.**)

Will students be moved from an existing program, track, or certificate into this new program, track, or certificate?

☐ Yes ☐ No

If yes, state the name of the program or track where students are currently enrolled and provide a list of students if possible:

Will students have the option to stay in their existing program, track, or certificate? ☐ Yes ☐ No

Name Change

Are you changing the name of an existing program, track, or certificate? ☐ Yes ☐ No

When is the name change effective? Please note: A name change will apply to the record of all students who are currently enrolled, readmitted or newly admitted into this program as of the effective date of this change.

If you are requesting a CIP Code change for an existing program, track, or certificate, please provide:

new CIP:

If a name change is your only revision, stop here. Otherwise, complete the rest of Part A.

Part A - Continued

Specify the faculty who will participate in the program, track or certificate and their credentials to do so: (List faculty and a brief paragraph of their credentials.)

--

Impact of changes on students: Will current students be impacted by the addition or revision of a program, track or certificate? If so, how?

--

If applicable, provide a written agreement (email is fine) from all involved units that they are in support of, will provide courses to, or will participate in the program, track, or certificate. Please attach the correspondence and also list the units here.

If an addition, provide a statement of who is likely to enroll and why. Please state if there is licensure or certification that depends upon this education, etc. Also, complete the following table.

	Year 1	Year 2	Year 3
Headcount			
SCHs			

If an addition, indicate likely career or student outcomes upon completion: (What will students do? What will their job titles be?)

Part A - Continued

If an addition or there are substantial REVISIONS to existing tracks or certificates, please complete the following table on financial support: (Specify all forms of support – assistantships, fellowships, and tuition remission.)

	No. assistantship students	Source of funds	No. fellowship students (specify fellowship)	No. tuition remissions	Source of funds
Year 1					
Year 2					
Year 3					

Checklist of items to be provided:

- ☐ Electronic graduate catalog copy for additions; track changes included if there are revisions. (required)
- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ Emails showing consultation with other units. (if applicable)
- ☐ If an addition, list of 1-3 students and 1-3 faculty for profiles in the graduate catalog (provide email address so Graduate Studies can contact them to write profiles and take photos). You may provide draft copy of profiles if you wish.
- ☐ If an addition, what disciplines does this program, track or certificate belong to? What other UCF graduate programs, tracks, or certificates are related to it? This information will be used to provide additional links for prospective students to search in the online graduate catalog.

Part B – For inactivations or suspensions of programs, tracks, or certificates

Are students currently enrolled in the program? ☐ Yes ☐ No

If yes, number of current students:

Please specify the intended time period of inactivation or suspension:

If program, track, or certificate is being inactivated or suspended, then attach a “teach out” plan for all current students specifying how they can finish the program or where students will be placed if moving to another program. The “teach out” plan should specify when courses will be offered to enable students to finish. Specify whether students will remain in the existing program to finish, and if so, when the completion date will be, whether students will be moved to another program, etc. Please provide a list of students where applicable.

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Proposed Effective Term/Year: _____

Unit(s) Housing Program: _____

Name of program, track and/or certificate: _____

Brief description of program (this description will show up in the graduate catalog copy): *Do not add complete catalog copy here.*

DELIVERY - Will program be delivered: ☐ Face to face ☐ Completely online ☐ Mixed delivery

Admissions deadlines: (Please specify if you have a different deadline for the track than for the program?)

Application requirements: (Please specify if you have different application requirements for the track than for the program? Will you admit directly to the track?)

Program Director(s) and contact information: (name, email, phone, campus address, program website address)

Please check one: this action affects a: ☐ Program ☐ Track ☐ Certificate

Please check one: this action is a(n):

- ☐ Addition. Please proceed to Part A.
- ☐ Revision. If a revision applies to multiple tracks, please list them here and then proceed to Part A:

-
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- ☐ Temporary Suspension of Admissions. Give Length of Suspension:
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Signature Page

RECOMMENDATIONS

<input type="checkbox"/> Yes	<input type="checkbox"/> No	Department Chair: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	College Curriculum Committee Chair: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	College Dean: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Chair or GSC: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Dean, College of Graduate Studies: _____	Date: _____

APPROVAL

Provost and Vice President for Academic Affairs: _____ Date: _____

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☐ Yes ☐ No

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Name Change

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Part A - Continued

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Year 3					

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- ☐ If an addition, what disciplines does this program, track or certificate belong to? What other UCF graduate programs, tracks, or certificates are related to it? This information will be used to provide additional links for prospective students to search in the online graduate catalog.

Part B – For inactivations or suspensions of programs, tracks, or certificates

Are students currently enrolled in the program? ☐ Yes ☐ No

If yes, number of current students:

Please specify the intended time period of inactivation or suspension:

If program, track, or certificate is being inactivated or suspended, then attach a “teach out” plan for all current students specifying how they can finish the program or where students will be placed if moving to another program. The “teach out” plan should specify when courses will be offered to enable students to finish. Specify whether students will remain in the existing program to finish, and if so, when the completion date will be, whether students will be moved to another program, etc. Please provide a list of students where applicable.

Sample teach out plan: Enter the terms and courses that will be taught for each term throughout the last semester. **Please delete course prefixes and numbers in this section if no teach out plan is required.**

Fall 2010	Spring 2011	Summer 2011	Fall 2011	Spring 2012

Checklist of items to be provided:

- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ E-mails showing consultation with other units. (if applicable)

Summary of Courses Not Offered for 5 Years

Graduate Council Curriculum Committee

February 20, 2012

1. CAH – received completed list
2. CBA – received partial list. Waiting for remainder.
3. COHPA – received no list. They are working on list.
4. COM – received complete list
5. CON – received completed list
6. COS – received completed list
7. CED – received completed list
8. CECS – received completed list
9. RCHM –received completed list
10. COP – received completed list



UNIVERSITY OF CENTRAL FLORIDA
COLLEGE OF GRADUATE STUDIES

Program Recommendation Form

This form is to be used to revise, add, suspend, or delete degree programs, tracks, or certificate programs. If there are changes to a program and the changes will affect the program tracks also, one form may be used for this type of change.

PLEASE NOTE: The deadline for new tracks or certificates is February 1 of each year. Any proposal for new tracks or certificates received after this date will not be included in the next year's catalog. Revisions to existing programs, tracks, or certificates are due by March 15. Any proposals for revisions received after that date will not be included in the next year's catalog. Please include catalog copy (description, curriculum, contact information, application requirements, and application deadlines). For revisions – attach the catalog copy showing changes (use Track Changes in Word).

College/Unit(s) Submitting Proposal: Engineering and Computer Science

Proposed Effective Term/Year: Fall 2012

Unit(s) Housing Program: Mechanical, Materials and Aerospace Engineering

Name of program, track and/or certificate: Aerospace Engineering, Master Program

Brief description of program (this description will show up in the graduate catalog copy): *Do not add complete catalog copy here.*

The Master of Science in Aerospace Engineering (MSAE) is designed to prepare students for careers as engineers in aerospace. Students may choose from three tracks: Accelerated BS to MSAE, Space Systems Design and Engineering, and Thermofluid Aerodynamic Systems Design and Engineering.

DELIVERY - Will program be delivered: ☐ Face to face ☐ Completely online ☒ Mixed delivery

Admissions deadlines: (Please specify if you have a different deadline for the track than for the program?)

Application requirements: (Please specify if you have different application requirements for the track than for the program? Will you admit directly to the track?)

Program Director(s) and contact information: (name, email, phone, campus address, program website address)

Dr. Alain Kassab, Alain.Kassab@ucf.edu, (407) 823-5778, http://www.mmae.ucf.edu/

Page 2 of UCF Program Recommendation Form

Please check one: this action affects a: ☒ Program ☐ Track ☐ Certificate

Please check one: this action is a(n):

☐ Addition. Please proceed to Part A.

☒ Revision. If a revision applies to multiple tracks, please list them here and then proceed to Part A:

Thermofluid Aerodynamic Systems Design and Engineering; Space Systems Design and Engineering

☒ Inactivation

☒ Temporary Suspension of Admissions. Give Length of Suspension:

Temporary suspension of admissions: The program will be removed from the online application. A notation will be entered in the graduate catalog indicating the length of the suspension of admissions. Currently enrolled students will not experience any issues with continued enrollment.

Inactivation: Admissions will be suspended for new students and the program will be removed from the online application. Students active in the program are eligible to complete the program under the appropriate criteria and an appropriate teach-out plan is required. The program will be removed from the catalog as of the approved term.

If you checked inactivation or you are temporarily suspending admissions, please go to Part B and complete it.

Signature Page

RECOMMENDATIONS

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Department Chair: <u>[Signature]</u>	Date: <u>12/7/12</u>
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	College Curriculum Committee Chair: <u>Charles H. Arley</u>	Date: <u>1/19/12</u>
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	College Dean: <u>Charles H. Arley</u>	Date: <u>1/19/12</u>
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Chair or GSC: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Dean, College of Graduate Studies: _____	Date: _____

APPROVAL

Provost and Executive Vice President: _____ Date: _____

Distribution: After approval is received from the Provost, distribution will be to:

Department(s); College; Registrar; Associate Registrar; Institutional Research; Academic Services; Faculty Senate;
University Analysis and Planning Support; College of Graduate Studies

Part A – For additions or revisions of programs, tracks or certificates

Brief statement of rationale: (Please indicate the rationale, how it affects the unit and faculty teaching in and students enrolled in the program, track or certificate.)

The revision will provide students solid understanding of the basic and broad spectrum of topics covered throughout the Aerospace program.

For Revisions:

Brief listing of Program Changes: (Please indicate the changes in bullet format. If there are changes to the credit hours of the program, required courses or other requirements, please state those changes. Remember to attach the catalog copy showing changes, using Track Changes in Word.)

The core courses required by the graduate students in the Aerospace MS program are revised:
Thermal & Fluid Track:
EML 5060 Math Methods
EML 5713 Intermediate Fluid Mechanics
EML 5152 Intermediate Heat Transfer
and one from the following classes (EML 5311 System Control, EML 5271 Intermediate Dynamics, EML 5237 Intermediate Mechanics)
Space System Track:
EML 5060 Math Methods
EML 5311 System Control
EML 5271 Intermediate Dynamics,
and one from the following classes (EML 5237 Intermediate Mechanics, EML 5713 Intermediate Fluid Mechanics, EML 5152 Intermediate Heat Transfer)

Will students be moved from an existing program, track, or certificate into this new program, track, or certificate?

☐ Yes ☒ No

If yes, state the name of the program or track where students are currently enrolled and provide a list of students if possible:

Will students have the option to stay in their existing program, track, or certificate? ☒ Yes ☐ No

Name Change

Are you changing the name of an existing program, track, or certificate? ☐ Yes ☒ No

The core courses required by the graduate students in the Aerospace MS program are revised:
Thermal & Fluid Track:
EML 5060 Math Methods
EML 5713 Intermediate Fluid Mechanics
EML 5152 Intermediate Heat Transfer
and one from the following classes (EML 5311 System Control, EML 5271 Intermediate Dynamics, EML 5237 Intermediate Mechanics)
Space System Track:
EML 5060 Math Methods
EML 5311 System Control
EML 5271 Intermediate Dynamics,
and one from the following classes (EML 5237 Intermediate Mechanics, EML 5713 Intermediate Fluid Mechanics, EML 5152 Intermediate Heat Transfer)

Page 5 of UCF Program Recommendation Form

If yes, provide the new name of the program, track, or certificate:
N/A

Provide the name of the current program, track, or certificate:
Aerospace Engineering, Masters Program

When is the name change effective? Please note: A name change will apply to the record of all students who are currently enrolled, readmitted or newly admitted into this program as of the effective date of this change.
N/A

Will students have the option to stay in their existing program, track, or certificate? ☐ Yes ☐ No

If you are requesting a CIP Code change for an existing program, track, or certificate, please provide:
old CIP:

new CIP:

If a name change is your only revision, stop here. Otherwise, complete the rest of Part A.

Part A - Continued

Specify the faculty who will participate in the program, track or certificate and their credentials to do so: (List faculty and a brief paragraph of their credentials.)

Dr. Kuo-Chi Lin, Dr. Larry Chew; Dr. Yunjun Xu; Dr. Ruey-Hung Chen; Dr. Seetha Raghavan; Dr. Marcel Ilie

Impact of changes on students: Will current students be impacted by the addition or revision of a program, track or certificate? If so, how?

The change should not affect students currently enrolled in the program as their required courses will still be offered.

Page 6 of UCF Program Recommendation Form

If applicable, provide a written agreement (email is fine) from all involved units that they are in support of, will provide courses to, or will participate in the program, track, or certificate. Please attach the correspondence and also list the units here.

N/A

If an addition, provide a statement of who is likely to enroll and why. Please state if there is licensure or certification that depends upon this education, etc. Also, complete the following table.

N/A

	Year 1	Year 2	Year 3
Headcount			
SCHs			

If an addition, indicate likely career or student outcomes upon completion: (What will students do? What will their job titles be?)

N/A

Part A - Continued

If an addition or there are substantial REVISIONS to existing tracks or certificates, please complete the following table on financial support: (Specify all forms of support – assistantships, fellowships, and tuition remission.)

	No. assistantship students	Source of funds	No. fellowship students (specify fellowship)	No. tuition remissions	Source of funds
Year 1					
Year 2					
Year 3					

Page 7 of UCF Program Recommendation Form

Checklist of items to be provided:

- ☐ Electronic graduate catalog copy for additions; track changes included if there are revisions. (required)
- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ Emails showing consultation with other units. (if applicable)
- ☐ If an addition, list of 1-3 students and 1-3 faculty for profiles in the graduate catalog (provide email address so Graduate Studies can contact them to write profiles and take photos). You may provide draft copy of profiles if you wish.
- ☐ If an addition, what disciplines does this program, track or certificate belong to? What other UCF graduate programs, tracks, or certificates are related to it? This information will be used to provide additional links for prospective students to search in the online graduate catalog.

Part B – For inactivations or suspensions of programs, tracks, or certificates

Are students currently enrolled in the program? ☐ Yes ☐ No

If yes, number of current students:

Please specify the intended time period of inactivation or suspension:

If program, track, or certificate is being inactivated or suspended, then attach a "teach out" plan for all current students specifying how they can finish the program or where students will be placed if moving to another program. The "teach out" plan should specify when courses will be offered to enable students to finish. Specify whether students will remain in the existing program to finish, and if so, when the completion date will be, whether students will be moved to another program, etc. Please provide a list of students where applicable:

Sample teach out plan: Enter the terms and courses that will be taught for each term throughout the last semester. Please delete course prefixes and numbers in this section if no teach out plan is required.

Fall 2010	Spring 2011	Summer 2011	Fall 2011	Spring 2012

Checklist of items to be provided:

- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ E-mails showing consultation with other units. (if applicable)

Aerospace Engineering MSAE

Accelerated BS to MSAE

TRACK DESCRIPTION

The Accelerated BS to MS track in the Aerospace Engineering MSAE program allows highly qualified undergraduate students in Aerospace Engineering to begin taking graduate-level courses that will count toward their master's degree while completing their baccalaureate degree program.

[Read More ▼▲](#)

CURRICULUM

Total Credit Hours Required:
30 Credit Hours Minimum beyond the Bachelor's Degree

The BSAE is awarded after completion of 128 total undergraduate student credit hours including 71 hours of engineering courses and all other university requirements, and the MSAE is awarded upon completion of the master's program. Courses designated in General Education Program and Common Program Prerequisites are usually completed in the first 60 hours (see engineering major requirements in the Undergraduate Catalog).

Up to 12 credit hours of approved 5000- and 6000-level courses of grades "B" (3.0) or better may be counted toward the BS and MS degrees. Additional notes on the Accelerated Undergraduate and Graduate Program in Aerospace Engineering:

- Students who change degree programs and select this major must adopt the most current catalog.
- Students must earn at least a "B" (3.0) in each undergraduate and graduate engineering course for them to be counted toward the major.

Undergraduate Requirements

Please see the current edition of the Undergraduate Catalog and the College of Engineering website listed above for additional information about academics and accelerated programs.

Graduate Requirements

For thesis option students, at least 18 credit hours beyond the 12 credit hours counted toward the undergraduate degree are required and must include 6 credit hours of thesis (EAS 6971); for the nonthesis option, the 18 credit hours need to include either EML 6085 Research Methods in MMAE (3 credit hours) or EML 6918 Directed Research (3 credit hours). The remaining credit hours can be selected from courses from other tracks.

Equipment Fee

Students in the Aerospace Engineering MSAE program pay a \$90 equipment fee each semester that they are enrolled.

INDEPENDENT LEARNING

The Independent Learning Requirement is met by successful completion of a master's thesis or EML 6085 Research Methods in MMAE. The nonthesis option independent learning experience is provided by the required course EML 6085 Research Methods in MMAE (3 credit hours). For students who are not on campus and upon prior approval from the graduate coordinator, EAS 6918 Directed Research (3 credit hours) may be substituted as the student's independent learning experience. In the case substitution EAS 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research certifying independent learning.

APPLICATION REQUIREMENTS

For information on general UCF graduate admissions requirements that apply to all prospective students, please visit the [Admissions](#) section of the Graduate Catalog. Applicants must [apply online](#). All requested materials must be submitted by the established deadline.

The **Accelerated BS to MS program** in Aerospace Engineering allows highly qualified University of Central Florida undergraduate majors in Aerospace Engineering to begin taking graduate level courses that will count toward their master's degree while completing their baccalaureate degree program. Students apply for admission to the accelerated program in either their junior year or senior year. If the student has a degree in the discipline, but were not previously part of this accelerated program, then they should apply to either the **Space Systems Design and Engineering** or **Thermofluid Aerodynamic Systems Design and Engineering Track** instead. Additional information about this track may be located at: <http://www.cecs.ucf.edu/academics/acceleratedbstomsprograms>.

The College of Engineering and Computer Science strongly encourages prospective applicants to request a free pre-screening (www.cecs.ucf.edu/prescreen) of their qualifications prior to submitting an online application for graduate admission. However, a pre-screening is not required; rather, it is offered as a courtesy to all prospective applicants before they commit to submitting a complete online application and paying an application processing fee.

Admissions decisions are made on the basis of a complete online application only, and not on the basis of any pre-screening. Prospective applicants who are encouraged to apply to their intended graduate program based on the information provided for their pre-screening are not assured of admission or financial assistance when they submit a complete online application. Although it is possible, it is not likely, that prospective applicants who are discouraged from formally applying to a graduate program at the pre-screening stage will be admitted if they elect to submit a complete online application anyway.

In addition to the [general UCF graduate application requirements](#), applicants to this program must provide:

- One official transcript (in a sealed envelope) from each college/university attended.
- Bachelor's degree in Aerospace Engineering or closely related discipline.
- Résumé.
- Statement of educational, research, and professional career objectives.

Faculty members may choose to conduct face-to-face or telephone interviews before accepting an applicant into their research program.

Additional courses may be required to correct deficiencies. Students should contact the MMAE graduate program director for further information.

Application Deadlines

Accelerated BS to MSAE	Fall Priority	Fall	Spring	Summer
Domestic Applicants	Jan 15	Jul 15	Dec 1	-
International Applicants	Jan 15	Jan 15	Jul 1	-
International Transfer Applicants	Jan 15	Mar 1	Sep 1	-

FINANCIALS

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see [Funding for Graduate School](#), which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The [Financial Information](#) section of the Graduate Catalog is another key resource.

Fellowships

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For

more information, see [Fellowships](#), which includes descriptions of UCF fellowships and what you should do to be considered for a fellowship.

Program **PROFILE**

Program Stats

[View more stats](#)

Contact **INFO**

Graduate Program

Alain Kassab PhD

Professor

gradmmae@ucf.edu

Telephone: 407-823-5778

Engineering 313 [Map](#)

Graduate Admissions

Admissions Counselor

gradadmissions@ucf.edu

Telephone: 407-823-2766 ext. 254

Millican Hall 230 [Map](#)

[Online Application](#)

[Graduate Admissions](#)

Mailing Address

UCF College of Graduate Studies

Millican Hall 230

PO Box 160112

Orlando, FL 32816-0112

Institution Codes

GRE: 5233

GMAT: RZT-HT-58

TOEFL: 5233

ETS PPI: 5233

Graduate Fellowships

Sharon Preston

Telephone: 407-823-6497

LaVonda Walker

Telephone: 407-823-0127

gradfellowship@ucf.edu

www.graduate.ucf.edu

Graduate Financial Aid

UCF Student Financial Assistance

Millican Hall 120

Telephone: 407-823-2827

Appointment Line: 407-823-5285

Fax: 407-823-5241

finaid@ucf.edu
<http://finaid.ucf.edu>

Space Systems Design and Engineering

TRACK DESCRIPTION

The Master of Science in Space Systems Design and Engineering (MSAE) is designed to prepare students for careers as engineers in aerospace.

[Read More ▼▲](#)

CURRICULUM

Total Credit Hours Required:

30 Credit Hours Minimum beyond the Bachelor's Degree

All students must identify an adviser and file an official degree program of study prior to the completion of 9 credit hours of study. The program of study must be approved by the department and therefore students should consult with the MMAE Graduate Director for assistance in filling out their program of study.

A student with an undergraduate degree outside of the selected departmental discipline may also be required to satisfy an articulation program. Substitutions to the program of study must meet with the approval of the adviser and the department.

Prerequisites (or equivalent)

- MAP 2302 Differential Equations
- EML 3034C Modeling Methods in Mechanical and Aerospace Engineering
- EAS 4134 High-Speed Aerodynamics
- EAS 4105 Flight Mechanics or EAS 4400 Spacecraft Attitude Dynamics
- EAS 4200 Flight Structures or EAS 4210 Space Structural Dynamics

Required Courses—12 Credit Hours

- EML 5060 Math Methods
- EML 5311 System Control
- EML 5271 Intermediate Dynamics,
- and one from the following classes (EML 5237 Intermediate Mechanics, EML 5713 Intermediate Fluid Mechanics, EML 5152 Intermediate Heat Transfer)
- ~~EAS 5407 Mechatronic Systems (3 credit hours)~~
 - ~~EAS 6507 Topics of Astrodynamics (3 credit hours)~~
 - ~~EML 5060 Mathematical Methods in Mechanical, Materials and Aerospace Engineering (3 credit hours)~~
 - ~~EML 6067 Finite Elements in Mechanical, Materials, and Aerospace Engineering I- EML 5311 System Control) (3 credit hours)~~

Elective Courses—12 Credit Hours

All students, both thesis and nonthesis, must complete at least 12 credit hours of electives .The following list are suggested electives to be taken in the program of study.

- EAS 6403C Attitude Determination and Control (3 credit hours)
- EML 5271 Intermediate Dynamics (3 credit hours)
- EAS 6415 Guidance, Navigation and Control (3 credit hours)
- EEL 6616 Adaptive Control (3 credit hours)
- EEL 6621 Nonlinear Control Systems (3 credit hours)
- EML 5152 Intermediate Heat Transfer (3 credit hours)
- EML 5211 Continuum Mechanics (3 credit hours)
- EML 6233 Fundamentals of Fatigue Analysis (3 credit hours)
- EML 5237 Intermediate Mechanics of Materials (3 credit hours)
- EML 6155 Convection Heat Transfer (3 credit hours)
- EML 6157 Radiation Heat Transfer (3 credit hours)
- EAS 6808 Space Environment and Payload Instrumentation (3 credit hours)
- EML 5311 System Control (3 credit hours)
- EEL 5432 Satellite Remote Sensing (3 credit hours)
- EEL 5542 Random Processes I (3 credit hours)
- EEL 5881 Software Engineering I (3 credit hours)

Thesis Option—6 Credit Hours

The thesis option requires 30 credit hours, at least half of which must be at the 6000 level and will include 6 credit hours of thesis credit. A student pursuing the thesis program may not register for thesis credit hours until an advisory committee has been appointed and the committee has reviewed the program of study and the proposed thesis topic.

- EAS 6971 Thesis (6 credit hours)

Nonthesis Option—6 Credit Hours

The nonthesis option is primarily designed to meet the needs of part-time students and requires 30 credit hours of course work, at least one-half of which must be at the 6000 level. Students pursuing the nonthesis option are required to take one additional elective and take either EML 6085 Research Methods in MMAE (or EAS 6918 Directed Research, with approval)* as part of their 30-credit-hour course requirement.

- Elective (3 credit hours)
- EML 6085 Research Methods in MMAE (3 credit hours)

*For students who are not on campus and upon prior approval from the graduate coordinator, EAS 6918 Directed Research (3 credit hours) may be substituted as the student's independent learning experience. If the substitution of EAS 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research certifying independent learning.

EML 6085 and EAS 6918 fulfill the independent learning requirement and either course is required for nonthesis students.

INDEPENDENT LEARNING

The Independent Learning Requirement is met by successful completion of a master's thesis for the thesis option. The non-thesis option independent learning experience is provided by the required course, EML 6085 Research Methods in MMAE (3 credit hours). For students who are not on campus and upon prior approval from the graduate coordinator, EAS 6918 Directed Research (3 credit hours) may be substituted as the student's independent learning experience. In the case substitution EAS 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research certifying independent learning.

APPLICATION REQUIREMENTS

For information on general UCF graduate admissions requirements that apply to all prospective students, please visit the [Admissions](#) section of the Graduate Catalog. Applicants must [apply online](#). All requested materials must be submitted by the established deadline.

The College of Engineering and Computer Science strongly encourages prospective applicants to request a free pre-screening (www.cecs.ucf.edu/prescreen) of their qualifications prior to submitting an online application for graduate admission. However, a pre-screening is not required; rather, it is offered as a courtesy to all prospective applicants before they commit to submitting a complete online application and paying an application processing fee.

Admissions decisions are made on the basis of a complete online application only, and not on the basis of any pre-screening. Prospective applicants who are encouraged to apply to their intended graduate program based on the information provided for their pre-screening are not assured of admission or financial assistance when they submit a complete online application. Although it is possible, it is not likely, that prospective applicants who

are discouraged from formally applying to a graduate program at the pre-screening stage will be admitted if they elect to submit a complete online application anyway.

In addition to the [general UCF graduate application requirements](#), applicants to this program must provide:

- One official transcript (in a sealed envelope) from each college/university attended.
- Bachelor's degree in Aerospace Engineering or closely related discipline.
- Résumé.
- Statement of educational, research, and professional career objectives.
- Applicants applying to this program who have attended a college/university outside the United States must provide a course-by-course credential evaluation with GPA calculation. Credential evaluations are accepted from [World Education Services \(WES\)](#) or [Josef Silny and Associates, Inc.](#) only.

Faculty members may choose to conduct face-to-face or telephone interviews before accepting an applicant into their research program.

Additional courses may be required to correct deficiencies. Students should contact the MMAE graduate program director for further information.

Application Deadlines

Space Systems Design and Engineering	Fall Priority	Fall	Spring	Summer
Domestic Applicants	Jan 15	Jul 15	Dec 1	-
International Applicants	Jan 15	Jan 15	Jul 1	-
International Transfer Applicants	Jan 15	Mar 1	Sep 1	-

FINANCIALS

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Fellowships

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For

more information, see [Fellowships](#), which includes descriptions of UCF fellowships and what you should do to be considered for a fellowship.

Program **PROFILE**

Program Stats

[View more stats](#)

Contact **INFO**

Graduate Program

Alain Kassab PhD

Professor

gradmmae@ucf.edu

Telephone: 407-823-5778

Engineering 313 [Map](#)

Graduate Admissions

Admissions Counselor

gradadmissions@ucf.edu

Telephone: 407-823-2766 ext. 254

Millican Hall 230 [Map](#)

[Online Application](#)

[Graduate Admissions](#)

Mailing Address

UCF College of Graduate Studies

Millican Hall 230

PO Box 160112

Orlando, FL 32816-0112

Institution Codes

GRE: 5233

GMAT: RZT-HT-58

TOEFL: 5233

ETS PPI: 5233

Graduate Fellowships

Sharon Preston

Telephone: 407-823-6497

LaVonda Walker

Telephone: 407-823-0127

gradfellowship@ucf.edu

www.graduate.ucf.edu

Graduate Financial Aid

UCF Student Financial Assistance

Millican Hall 120

Telephone: 407-823-2827

Appointment Line: 407-823-5285

Fax: 407-823-5241

finaid@ucf.edu
<http://finaid.ucf.edu>

Thermofluid Aerodynamic Systems Design and Engineering

TRACK DESCRIPTION

The Thermofluid Aerodynamics Systems Design and Engineering track in the Aerospace Engineering MSAE program is designed to prepare students for careers as engineers in aerospace.

Read More ▼▲

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit www.intl.ucf.edu. If you have any questions, please consult the International Services Center at 407-823-2337.

CURRICULUM

Total Credit Hours Required:
30 Credit Hours Minimum beyond the Bachelor's Degree

All students must identify an adviser and file an official degree program of study prior to the completion of 9 credit hours of study. The program of study must be approved by the department and therefore students should consult with the MMAE Graduate Director for assistance in filling out their program of study. Both thesis and nonthesis options require 30 credit hours of courses and at least half of the credit hours in the program of study must be at the 6000 level.

A student with an undergraduate degree outside of the selected departmental discipline may be required to satisfy an articulation program. Substitutions to the program of study must meet with the approval of the adviser and the department.

Prerequisites (or equivalent)

- MAP 2302 Differential Equations
- EML 3034C Modeling Methods in Mechanical and Aerospace Engineering
- EAS 4134 High-Speed Aerodynamics
- EAS 4300 Aerothermodynamics of Propulsion Systems or EML 4703 Fluid Mechanics II
- EAS 4105 Flight Mechanics
- EML 4142 Heat Transfer

Required Courses—12 Credit Hours

- EML 5060 Math Methods
- EML 5713 Intermediate Fluid Mechanics
- EML 5152 Intermediate Heat Transfer
- and one from the following classes (EML 5311 System Control, EML 5271 Intermediate Dynamics, EML 5237 Intermediate Mechanics)
- ~~EAS 6138 Advanced Gas Dynamics (3 credit hours)~~
- ~~EML 5060 Mathematical Methods in Mechanical, Materials and Aerospace Engineering (3 credit hours)~~
- ~~EML 5131 Combustion Phenomena (3 credit hours)~~
- ~~EML 5152 Intermediate Heat Transfer (3 credit hours)~~

Formatted: Indent: Left: 0.46", Outline numbered + Level: 1 + Numbering Style: Bullet + Aligned at: 0.25" + Tab after: 0.5" + Indent at: 0.5"

Elective Courses—12 Credit Hours

All students, both thesis and nonthesis, must complete at least 12 hours of electives from the list below after conferring with their adviser.

- EAS 5123 Intermediate Aerodynamics (3 credit hours)
- EAS 6185 Turbulent Flow (3 credit hours)
- EAS 5315 Rocket Propulsion (3 credit hours)
- EML 5713 Intermediate Fluid Mechanics (3 credit hours)
- ~~EML 5131~~6XXX Combustion Phenomena (3 credit hours)
- EML 6712 Viscous Flow (3 credit hours)
- EML 5402 Turbomachinery (3 credit hours)
- EML 5105 Gas Kinetics and Statistical Thermodynamics (3 credit hours)
- EML 6155 Convection Heat Transfer (3 credit hours)
- EML 6725 Computational Fluid Dynamics and Heat Transfer I (3 credit hours)

- EAS 5302 Direct Energy Conversion (3 credit hours)
- EAS 6807 Aerospace Measurements/Instrumentation (3 credit hours)
- EML 6124 Two-Phase Flow (3 credit hours)
- EML 6726 Computational Fluid Dynamics and Heat Transfer II (3 credit hours)
- EML 6154 Conduction Heat Transfer (3 credit hours)
- EML 5713 Intermediate Fluid Mechanics (3 credit hours)
- EML 6157 Radiation Heat Transfer (3 credit hours)
- EAS 5123 Intermediate Aerodynamics (3 credit hours)
- EML 5211 Continuum Mechanics (3 credit hours)
- EML 5237 Intermediate Mechanics of Materials (3 credit hours)
- EML 5532C Computer-Aided Design for Manufacture (3 credit hours)
- EML 5546 Engineering Design with Composite Materials (3 credit hours)
- EML 6547 Engineering Fracture Mechanics in Design (3 credit hours)

Thesis Option—6 Credit Hours

The thesis option requires 6 credit hours of thesis in addition to the required and elective courses listed above. A student pursuing the thesis program may not register for thesis credit hours until an advisory committee has been appointed and the committee has reviewed the program of study and the proposed thesis topic.

- EAS 6971 Thesis (6 credit hours)

Nonthesis Option—6 Credit Hours

The nonthesis option is primarily designed to meet the needs of part-time students and requires one additional elective and EML 6085 Research Methods in MMAE (or EAS 6918 Directed Research, with approval)* as part of their 30-credit-hour course requirement.

- Elective (3 credit hours)
- EML 6085 Research Methods in MMAE (3 credit hours)

* For students who are not on campus and upon prior approval from the graduate coordinator, EAS 6918 Directed Research (3 credit hours) may be substituted as the student's independent learning experience. If the substitution of EAS 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research.

EML 6085 (or EAS 6918) fulfills the independent learning requirement for nonthesis students.

INDEPENDENT LEARNING

The Independent Learning Requirement is met by successful completion of a master's thesis for the thesis option. The nonthesis option independent learning experience is provided by the required course EML

6085 Research Methods in MMAE (3 credit hours). For students who are not on campus and upon prior approval from the graduate coordinator, EAS 6918 Directed Research (3 credit hours) may be substituted as the student's independent learning experience. In the case substitution EAS 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research certifying independent learning.

APPLICATION REQUIREMENTS

For information on general UCF graduate admissions requirements that apply to all prospective students, please visit the [Admissions](#) section of the Graduate Catalog. Applicants must [apply online](#). All requested materials must be submitted by the established deadline.

The College of Engineering and Computer Science strongly encourages prospective applicants to request a free pre-screening (www.cecs.ucf.edu/prescreen) of their qualifications prior to submitting an online application for graduate admission. However, a pre-screening is not required; rather, it is offered as a courtesy to all prospective applicants before they commit to submitting a complete online application and paying an application processing fee.

Admissions decisions are made on the basis of a complete online application only, and not on the basis of any pre-screening. Prospective applicants who are encouraged to apply to their intended graduate program based on the information provided for their pre-screening are not assured of admission or financial assistance when they submit a complete online application. Although it is possible, it is not likely, that prospective applicants who are discouraged from formally applying to a graduate program at the pre-screening stage will be admitted if they elect to submit a complete online application anyway.

In addition to the [general UCF graduate application requirements](#), applicants to this program must provide:

- One official transcript (in a sealed envelope) from each college/university attended.
- Bachelor's degree in Aerospace Engineering or closely related discipline.
- Résumé.
- Statement of educational, research, and professional career objectives.
- Applicants applying to this program who have attended a college/university outside the United States must provide a course-by-course credential evaluation with GPA calculation. Credential evaluations are accepted from [World Education Services \(WES\)](#) or [Josef Silny and Associates, Inc.](#) only.

Faculty members may choose to conduct face-to-face or telephone interviews before accepting an applicant into their research program.

Additional courses may be required to correct deficiencies. Students should contact the MMAE graduate program director for further information.

Application Deadlines

Thermofluid Aerodynamic Systems Design and Engineering	Fall Priority	Fall	Spring	Summer
Domestic Applicants	Jan 15	Jul 15	Dec 1	-
International Applicants	Jan 15	Jan 15	Jul 1	-
International Transfer Applicants	Jan 15	Mar 1	Sep 1	-

FINANCIALS

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see [Funding for Graduate School](#), which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The [Financial Information](#) section of the Graduate Catalog is another key resource.

Fellowships

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see [Fellowships](#), which includes descriptions of UCF fellowships and what you should do to be considered for a fellowship.

Graduate Program

Alain Kassab PhD
Professor
gradmmae@ucf.edu
Telephone: 407-823-5778
Engineering 313 [Map](#)

Graduate Admissions

Admissions Counselor
gradadmissions@ucf.edu
Telephone: 407-823-2766 ext. 254
Millican Hall 230 [Map](#)
[Online Application](#)
[Graduate Admissions](#)
Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112
Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Graduate Fellowships

Sharon Preston

Telephone: 407-823-6497

LaVonda Walker

Telephone: 407-823-0127

gradfellowship@ucf.edu

www.graduate.ucf.edu

Graduate Financial Aid

UCF Student Financial Assistance

Millican Hall 120

Telephone: 407-823-2827

Appointment Line: 407-823-5285

Fax: 407-823-5241

finaid@ucf.edu

<http://finaid.ucf.edu>



UNIVERSITY OF CENTRAL FLORIDA
COLLEGE OF GRADUATE STUDIES

Program Recommendation Form

This form is to be used to revise, add, suspend, or delete degree programs, tracks, or certificate programs. If there are changes to a program and the changes will affect the program tracks also, one form may be used for this type of change.

PLEASE NOTE: The deadline for new tracks or certificates is February 1 of each year. Any proposal for new tracks or certificates received after this date will not be included in the next year's catalog. Revisions to existing programs, tracks, or certificates are due by March 15. Any proposals for revisions received after that date will not be included in the next year's catalog. Please include catalog copy (description, curriculum, contact information, application requirements, and application deadlines). For revisions – attach the catalog copy showing changes (use Track Changes in Word).

College/Unit(s) Submitting Proposal: Engineering and Computer Science

Proposed Effective Term/Year: 2012-2013

Unit(s) Housing Program: Mechanical, Materials & Aerospace Engineering

Name of program, track and/or certificate: Mechanical Systems Track

Brief description of program (this description will show up in the graduate catalog copy): *Do not add complete catalog copy here.*

The Master of Science degree in Mechanical Engineering is primarily intended for students with a bachelor's degree in Mechanical or Aerospace engineering or a closely related discipline obtained from a recognized accredited institution. The program offers Computer-Aided Mechanical Engineering, Mechanical Systems, Miniature Engineering Systems, Professional, Thermofluids and Accelerated BS to MS tracks.

DELIVERY - Will program be delivered: ☐ Face to face ☐ Completely online ☒ Mixed delivery

Admissions deadlines: (Please specify if you have a different deadline for the track than for the program?)

Application requirements: (Please specify if you have different application requirements for the track than for the program? Will you admit directly to the track?)

Program Director(s) and contact information: (name, email, phone, campus address, program website address)

Dr. Alain Kassab, Alain.Kassab@ucf.edu, (407) 823-5778, http://www.mmae.ucf.edu/

Page 2 of UCF Program Recommendation Form

Please check one: this action affects a: ☐ Program ☒ Track ☐ Certificate

Please check one: this action is a(n):

☐ Addition. Please proceed to Part A.

☒ Revision. If a revision applies to multiple tracks, please list them here and then proceed to Part A:

☐ Inactivation

☐ Temporary Suspension of Admissions. Give Length of Suspension:

Temporary suspension of admissions: The program will be removed from the online application. A notation will be entered in the graduate catalog indicating the length of the suspension of admissions. Currently enrolled students will not experience any issues with continued enrollment.

Inactivation: Admissions will be suspended for new students and the program will be removed from the online application. Students active in the program are eligible to complete the program under the appropriate criteria and an appropriate teach-out plan is required. The program will be removed from the catalog as of the approved term.

If you checked inactivation or you are temporarily suspending admissions, please go to Part B and complete it.

Signature Page

RECOMMENDATIONS

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Department Chair: <u>[Signature]</u>	Date: <u>12/2/12</u>
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	College Curriculum Committee Chair: <u>Charles H. Jolly</u>	Date: <u>6/19/12</u>
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	College Dean: <u>Charles H. Jolly</u>	Date: <u>6/19/12</u>
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Chair or GSC: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Dean, College of Graduate Studies: _____	Date: _____

APPROVAL

Provost and Executive Vice President: _____ Date: _____

Distribution: After approval is received from the Provost, distribution will be to:

Department(s); College; Registrar; Associate Registrar; Institutional Research; Academic Services; Faculty Senate;
University Analysis and Planning Support; College of Graduate Studies

Part A – For additions or revisions of programs, tracks or certificates

Brief statement of rationale: (Please indicate the rationale, how it affects the unit and faculty teaching in and students enrolled in the program, track or certificate.)

The revision will provide students solid understanding of the basic and broad spectrum of topics covered throughout the Mechanical Systems track.

For Revisions:

Brief listing of Program Changes: (Please indicate the changes in bullet format. If there are changes to the credit hours of the program, required courses or other requirements, please state those changes. Remember to attach the catalog copy showing changes, using Track Changes in Word.)

- Removal of EML 6067: Finite Elements I as a required course
- Addition of EML 5237: Intermediate Mechanics of Materials as a required course
- Require update Continuum Mechanics prefix and course number from EML 5211 to EML 6XXX

Will students be moved from an existing program, track, or certificate into this new program, track, or certificate?

☐ Yes ☒ No

If yes, state the name of the program or track where students are currently enrolled and provide a list of students if possible:

Mechanical Systems Track

Will students have the option to stay in their existing program, track, or certificate? ☒ Yes ☐ No

Name Change

Are you changing the name of an existing program, track, or certificate? ☐ Yes ☒ No

Page 5 of UCF Program Recommendation Form

If yes, provide the new name of the program, track, or certificate:

N/A

Provide the name of the current program, track, or certificate:

Mechanical Systems Track

When is the name change effective? Please note: A name change will apply to the record of all students who are currently enrolled, readmitted or newly admitted into this program as of the effective date of this change.

N/A

Will students have the option to stay in their existing program, track, or certificate? ☐ Yes ☐ No

If you are requesting a CIP Code change for an existing program, track, or certificate, please provide:

old CIP:

new CIP:

If a name change is your only revision, stop here. Otherwise, complete the rest of Part A.

Part A - Continued

Specify the faculty who will participate in the program, track or certificate and their credentials to do so: (List faculty and a brief paragraph of their credentials.)

Dr. Faissal Moslehy; Dr. Yuanli Bai; Dr. Jihua Gou; Dr. Chengying Xu; Dr. Seetha Raghavan; Dr. Alain Kassab; Dr. Ali Gordon

Impact of changes on students: Will current students be impacted by the addition or revision of a program, track or certificate? If so, how?

The change should not affect students currently enrolled in the program as their required courses will still be offered.

Page 6 of UCF Program Recommendation Form

If applicable, provide a written agreement (email is fine) from all involved units that they are in support of, will provide courses to, or will participate in the program, track, or certificate. Please attach the correspondence and also list the units here.

N/A

If an addition, provide a statement of who is likely to enroll and why. Please state if there is licensure or certification that depends upon this education, etc. Also, complete the following table.

N/A

	Year 1	Year 2	Year 3
Headcount			
SCHs			

If an addition, indicate likely career or student outcomes upon completion: (What will students do? What will their job titles be?)

N/A

Part A - Continued

If an addition or there are substantial REVISIONS to existing tracks or certificates, please complete the following table on financial support: (Specify all forms of support – assistantships, fellowships, and tuition remission.)

	No. assistantship students	Source of funds	No. fellowship students (specify fellowship)	No. tuition remissions	Source of funds
Year 1					
Year 2					
Year 3					

Checklist of items to be provided:

- ☐ Electronic graduate catalog copy for additions; track changes included if there are revisions. (required)
- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ Emails showing consultation with other units. (if applicable)
- ☐ If an addition, list of 1-3 students and 1-3 faculty for profiles in the graduate catalog (provide email address so Graduate Studies can contact them to write profiles and take photos). You may provide draft copy of profiles if you wish.
- ☐ If an addition, what disciplines does this program, track or certificate belong to? What other UCF graduate programs, tracks, or certificates are related to it? This information will be used to provide additional links for prospective students to search in the online graduate catalog.

Part B – For inactivations or suspensions of programs, tracks, or certificates

Are students currently enrolled in the program? ☒ Yes ☐ No

If yes, number of current students:

Please specify the intended time period of inactivation or suspension:

If program, track, or certificate is being inactivated or suspended, then attach a "teach out" plan for all current students specifying how they can finish the program or where students will be placed if moving to another program. The "teach out" plan should specify when courses will be offered to enable students to finish. Specify whether students will remain in the existing program to finish, and if so, when the completion date will be, whether students will be moved to another program, etc. Please provide a list of students where applicable.

Required courses and electives will be offered as part of the graduate program offering for the next 3 years.
No other units are affected. These are internal MMAE tracks. Classes within these tracks are not eliminated; tracks will be consolidated in the mechanical systems track.

Sample teach out plan: Enter the terms and courses that will be taught for each term throughout the last semester. Please delete course prefixes and numbers in this section if no teach out plan is required.

Fall 2010	Spring 2011	Summer 2011	Fall 2011	Spring 2012
				See graduate course offering
				(attached 5 yr plan)

Checklist of items to be provided:

- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ E-mails showing consultation with other units. (if applicable)

Mechanical Systems - Solid Mechanics Track

COURSE NUMBER/NAME	Frequency												Instructors	
		SP12	SP13	SP14	SP15	SP16	SP17						Current	Potential
EML 6xxx Continuum Mechanics	1							Reg					Moslehy	Bai
EML 5271 Int. Dynamics	1	1	1	1	1	1	1						Moslehy	Lin, C. Xu
EML 5237 Int. Mechanics	1	1	1	1	1	1	1						Gou	Raghavan, Bai, Moslehy
EML 5060 Math Methods	1												Kassab	
EML 5290 Introduction to MEMS	1												Q. Chen	
EML 6296 MEMS Mechanisms	2	1		1		1							Q. Chen	
EML 6297 MEMS Characterization	2		1		1		1						Q. Chen	
EML 5291 MEMS Materials	2	1		1		1							Cho	
EML 6299 Advanced Miniaturization	2		1		1		1						Cho	
EML 6295 Sensors & Actuators	2+												Q. Chen, C. Xu	
EML 5292 Scaling Law	2+												Kapat	
EGM 6653 Elasticity (+ Plasticity)	1.5			1			1						Bai, Moslehy, Gou	
EML 6067 Finite Element I	1.5	1			1								Raghavan	Bai
EML 5546 Design with Composites	1.5		1				1						Gou	
EML 6547 Fracture Mechanics	2												Gordon	
EML 6233 Fatigue	2												Gordon	
EML 6035 Experimental Mechanics	2	1		1		1							Moslehy, Gordon	
EML 6068 Finite Element II	2+						1						Bai, Raghavan	
EML 6238 Plates and Shells	2+		1										Bai	
EML 5572 Probabilistic Methods	2+												Gordon, C. Xu	
EML 5224 Acoustics	2+												TBD	
EML 5245 Tribology	2+												Q. Chen	
EML 6062 Boundary Elements	2+		1		1		1						Kassab	
EML 6xxx Turbomachinery Design	2+	1		1		1							Gordon	
EML 6xxx Turbomachinery Manufacturing	2+	1		1		1							Gou	
EML 5066 Computational Methods	2	1		1		1		w/therm					Kassab	
EML 5228 Modal Analysis	2	1		1		1							Moslehy, Jayasuria, Bai	
EML 6223 Advanced Vibrational Systems	2+					1							Moslehy, Jayasuria	
EML 6226 Analytical Dynamics	2+		1										Moslehy, Bai	
EML 6227 Non-linear Vibrations	2+												Moslehy, Jayasuria	
EML 6808 Robot Manipulators	2+						1						C. Xu, Y. Xu, T. Das	
EML 6085 Research Methods	1	1	1	1	1	1	1						Illegbusi	Gou, Chen
EML 5592C CAD/CAM								Self w/undergrads					Shah	
EML 5936 Seminar								Self w/undergrads					Gordon	
													TBD	
EML 5587C Mechanics of Biomechanics I	2+												TBD	
EML 5588C Mechanics of Biomechanics II	2+												TBD	

TOTAL COURSES per Semester

6 8 5 7 5 8 6 6 6 8 5 7

Notes: Two new courses will be added to Mechanical Systems in Spring 2012 with the commitment of New Florida Grant.

Course 1: Turbomachinery Design for Mechanical Integrity and Reliability, Instructor: A. Gordon

Course 2: Turbomachinery Manufacturing, Instructor: J. Gou

No changes to curriculum-----

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Mechanical Engineering MSME

Accelerated BS to MSME

TRACK DESCRIPTION

The Accelerated Undergraduate/Graduate program in Mechanical Engineering allows highly qualified undergraduate majors in Mechanical Engineering to begin taking graduate-level courses that will count toward their master's degree while completing their baccalaureate degree program.

[Read More ▼▲](#)

CURRICULUM

Total Credit Hours Required:

30 Credit Hours Minimum beyond the Bachelor's Degree

The BSME is awarded after completing all university requirements, including 128 total credit hours and 71 credit hours of engineering courses. The MSME is awarded upon completion of the master's program. Courses designated in General Education Program and Common Program Prerequisites are usually completed in the first 60 hours (see engineering major requirements in the Undergraduate Catalog).

Up to 12 credit hours of approved graduate level courses of grades "B" (3.0) or better may be counted towards the BS and MS degrees. Additional notes on the Accelerated Undergraduate and Graduate Program in Mechanical Engineering are as follows:

- Students who change degree programs and select this major must adopt the most current catalog.
- Students must earn at least a "B" (3.0) in each undergraduate and graduate engineering course for them to be counted toward the major.

Undergraduate Requirements

Please see the current edition of the Undergraduate Catalog for additional information about this program.

Graduate Requirements

The Mechanical Engineering program requires a minimum of 30 credit hours beyond the bachelor's degree, and offers thesis and nonthesis options in each of the five-two tracks Computer-Aided Mechanical Engineering, Mechanical Systems, Miniature Engineering Systems, Professional, and Thermofluids. At least 24 credit hours

of course work must be taken, exclusive of thesis and research. The thesis options require 24 credit hours of formal courses, and six credit hours of thesis. The nonthesis options require 30 credit hours of courses, including completion of EML 6085 Research Methods in MMAE. For students who are not on campus and upon prior approval from the graduate coordinator, EML 6918 Directed Research (3 credit hours) may be substituted as the student's independent learning experience. In the case substitution EML 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research.

Equipment Fee

Students in the Mechanical Engineering MSME program pay a \$90 equipment fee each semester that they are enrolled.

INDEPENDENT LEARNING

The Independent Learning requirement is met by successful completion of a master's thesis for the thesis option. The nonthesis option independent learning experience is provided by the required course, EML 6085 Research Methods in MMAE (3 credit hours). For students who are not on campus and upon prior approval from the graduate coordinator, EML 6918 Directed Research (3 credit hours) may be substituted as the student's independent learning experience. In the case substitution EML 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research certifying independent learning.

APPLICATION REQUIREMENTS

For information on general UCF graduate admissions requirements that apply to all prospective students, please visit the [Admissions](#) section of the Graduate Catalog. Applicants must [apply online](#). All requested materials must be submitted by the established deadline.

The **Accelerated BS to MS** program in Mechanical Engineering allows highly qualified University of Central Florida undergraduate majors in Mechanical Engineering to begin taking graduate level courses that will count toward their master's degree while completing their baccalaureate degree program. Students apply for admission to the accelerated program in either their junior year or senior year. If the student has a degree in the discipline, but were not previously part of this accelerated program, then they should apply to either the ~~Computer-Aided Mechanical Engineering Track~~, **Mechanical Systems Track**, ~~Miniature Engineering Systems Track~~, ~~Professional Track~~, or **Thermofluids Track**. Additional information about this track may be located at: <http://www.cecs.ucf.edu/academics/acceleratedbstomsprograms>.

The College of Engineering and Computer Science strongly encourages prospective applicants to request a free pre-screening (www.cecs.ucf.edu/prescreen) of their qualifications prior to submitting an online application for graduate admission. However, a pre-screening is not required; rather, it is offered as a courtesy to all prospective applicants before they commit to submitting a complete online application and paying an application processing fee.

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In addition to the [general UCF graduate application requirements](#), applicants to this program must provide:

- One official transcript (in a sealed envelope) from each college/university attended.
- A bachelor's degree in Mechanical or Aerospace Engineering, or a closely related discipline.
- Résumé.
- Statement of educational, research, and professional career objectives.

Faculty members may choose to conduct face-to-face or telephone interviews before accepting an applicant into their research program.

Additional courses may be required to correct deficiencies. Applicants should contact the MMAE graduate program director for more information.

Application Deadlines

Accelerated BS to MSME	Fall Priority	Fall	Spring	Summer
Domestic Applicants	Jan 15	Jul 15	Dec 1	-
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International Transfer Applicants	Jan 15	Mar 1	Sep 1	-

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Graduate Program

Alain Kassab PhD

Professor

gradmmae@ucf.edu

Telephone: 407-823-5778

Engineering 313 [Map](#)

Graduate Admissions

Admissions Counselor

gradadmissions@ucf.edu

Telephone: 407-823-2766 ext. 254

Millican Hall 230 [Map](#)

[Online Application](#)

[Graduate Admissions](#)

Mailing Address

UCF College of Graduate Studies

Millican Hall 230

PO Box 160112

Orlando, FL 32816-0112

Institution Codes

GRE: 5233

GMAT: RZT-HT-58

TOEFL: 5233

ETS PPI: 5233

Graduate Fellowships

Sharon Preston

Telephone: 407-823-6497

LaVonda Walker

Telephone: 407-823-0127

gradfellowship@ucf.edu

www.graduate.ucf.edu

Graduate Financial Aid

UCF Student Financial Assistance

Millican Hall 120

Telephone: 407-823-2827

Appointment Line: 407-823-5285

Fax: 407-823-5241

finaid@ucf.edu

<http://finaid.ucf.edu>

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Inactivation of track ----#4 on agenda

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Computer-Aided Mechanical Engineering

TRACK DESCRIPTION

The Master of Science in Mechanical Engineering is primarily intended for students with a bachelor's degree in Mechanical or Aerospace engineering or a closely related discipline obtained from a recognized accredited institution. The program offers Computer-Aided Mechanical Engineering, Mechanical Systems, Miniature Engineering Systems, Professional, Thermofluids and Accelerated BS to MS tracks.

Read More ▼▲

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International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit www.intl.ucf.edu. If you have any questions, please consult the International Services Center at 407-823-2337.

CURRICULUM

Total Credit Hours Required:

30 Credit Hours Minimum beyond the Bachelor's Degree

All students must identify an advisor and file an official degree program of study prior to the completion of 9 credit hours of study. Students should consult with the MMAE Graduate Program Director for assistance in designing their program of study. Both the thesis and nonthesis programs of study must have departmental approval and must include at least 24 credit hours of formal course work, exclusive of thesis and research. In addition, at least one half of the credit hours must be from courses at the 6000 level. Substitutions to the program of study must meet with the approval of the advisor and the department. —

A student with an undergraduate degree outside of the selected departmental discipline may be required to satisfy an articulation program and take additional prerequisites. More information is available from the MMAE departmental website listed above.

Prerequisite Courses (or equivalent)

- Differential Equations (MAP 2302)
- Modeling Methods in Mechanical and Aerospace Engineering (EML 3034C)
- Thermodynamics of Mechanical Systems (EML 3101)
- Structure and Properties of Materials (EGN 3365)

- Machine Design and Analysis (EML 3500)

Required Courses—12 Credit Hours

- EML 5060 Mathematical Methods in Mechanical, Materials and Aerospace Engineering (3 credit hours)
- EML 5211 Continuum Mechanics (3 credit hours)
- EML 5271 Intermediate Dynamics (3 credit hours)
- EML 6067 Finite Elements in Mechanical, Materials and Aerospace Engineering I (3 credit hours)

Elective Courses—12 Credit Hours

All students, both thesis and nonthesis, must take 12 credit hours of electives from the following list or from courses from other tracks. Students should choose electives in consultation with their advisor.

- EGN 5858C Prototyping and Product Realization (3 credit hours)
- EML 5237 Intermediate Mechanics of Materials (3 credit hours)
- EML 5026C Advanced Engineering Design Practice (3 credit hours)
- EML 5532C Computer-Aided Design for Manufacture (3 credit hours)
- EML 6062 Boundary Element Methods in Engineering (3 credit hours)
- EML 6547 Engineering Fracture Mechanics in Design (3 credit hours)
- EML 6305C Experimental Mechanics (3 credit hours)
- EML 6725 Computational Fluid Dynamics and Heat Transfer I (3 credit hours)
- EAS 6138 Advanced Gas Dynamics (3 credit hours)
- EAS 6185 Turbulent Flow (3 credit hours)
- EML 5105 Gas Kinetics and Statistical Thermodynamics (3 credit hours)
- EML 5402 Turbomachinery (3 credit hours)
- EML 6155 Convection Heat Transfer (3 credit hours)
- EML 6712 Mechanics of Viscous Flow (3 credit hours)
- EML 5066 Computational Methods in Mechanical, Materials and Aerospace Engineering (3 credit hours)
- EML 5131 Combustion Phenomena (3 credit hours)
- EML 5152 Intermediate Heat Transfer (3 credit hours)
- EML 5713 Intermediate Fluid Mechanics (3 credit hours)
- EML 6154 Conduction Heat Transfer (3 credit hours)
- EML 6233 Fundamentals of Fatigue Analysis (3 credit hours)
- EML 5546 Engineering Design with Composite Materials (3 credit hours)

Thesis Option—6 Credit Hours

Thesis students must complete an independent research project, and write and successfully defend a thesis describing the project. A student pursuing the thesis program may not register for thesis credit hours until an

advisory committee has been appointed and the committee has reviewed the program of study and the proposed thesis topic.

- EML 6971 Thesis (6 credit hours)

The College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's adviser and posted on the college's [website](#) and on the [Events Calendar](#) at the College of Graduate Studies website at least two weeks before the defense date.

Nonthesis Option—6 Credit Hours

Nonthesis students are required to take EML 6085 Research Methods in MMAE (or EML 6918 Directed Research, with approval) as part of the 30-credit-hour course requirement. Furthermore, nonthesis students must take an additional elective beyond the 12 credit hours of electives described above.

- EML 6085 Research Methods in MMAE (3 credit hours)*
- Elective (3 credit hours)

* For students who are not on campus and with prior approval from the graduate program director, EML 6918, Directed Research (3 credit hours) may be substituted as the student's independent learning experience. If the substitution of EML 6918 is approved, a letter must be provided by the faculty member agreeing to supervise the directed research.

Equipment Fee

Students in the Mechanical Engineering MSME program pay a \$90 equipment fee each semester that they are enrolled.

INDEPENDENT LEARNING

The Independent Learning requirement is met by successful completion of a master's thesis for the thesis option. The independent learning experience in the nonthesis option is provided by the required course, EML 6085 Research Methods in MMAE (3 credit hours). For students who are not on campus and with prior approval from the graduate program director, EML 6918 Directed Research (3 credit hours) may be substituted as the student's independent learning experience. If the substitution of EML 6918 is approved, a letter must be provided by the faculty member agreeing to supervise the directed research and certifying that the experience includes independent learning.

APPLICATION REQUIREMENTS

For information on general UCF graduate admissions requirements that apply to all prospective students, please visit the [Admissions](#) section of the Graduate Catalog. Applicants must [apply online](#). All requested materials must be submitted by the established deadline.

The College of Engineering and Computer Science strongly encourages prospective applicants to request a free pre-screening (www.cecs.ucf.edu/prescreen) of their qualifications prior to submitting an online application for graduate admission. However, a pre-screening is not required; rather, it is offered as a courtesy to all prospective applicants before they commit to submitting a complete online application and paying an application processing fee.

Admissions decisions are made on the basis of a complete online application only, and not on the basis of any pre-screening. Prospective applicants who are encouraged to apply to their intended graduate program based on the information provided for their pre-screening are not assured of admission or financial assistance when they submit a complete online application. Although it is possible, it is not likely, that prospective applicants who are discouraged from formally applying to a graduate program at the pre-screening stage will be admitted if they elect to submit a complete online application anyway.

In addition to the [general UCF graduate application requirements](#), applicants to this program must provide:

- One official transcript (in a sealed envelope) from each college/university attended.
- A bachelor's degree in Mechanical or Aerospace Engineering, or a closely related discipline.
- Résumé.
- Statement of educational, research, and professional career objectives.
- Applicants applying to this program who have attended a college/university outside the United States must provide a course-by-course credential evaluation with GPA calculation. Credential evaluations are accepted from [World Education Services \(WES\)](#) or [Josef Silny and Associates, Inc.](#) only.

Faculty members may choose to conduct face-to-face or telephone interviews before accepting an applicant into their research program.

Additional courses may be required to correct deficiencies. Applicants should contact the MMAE graduate program director for more information.

Application Deadlines

Computer-Aided Mechanical Engineering	Fall Priority	Fall	Spring	Summer
Domestic Applicants	Jan 15	Jul 15	Dec 1	-
International Applicants	Jan 15	Jan 15	Jul 1	-
International Transfer Applicants	Jan 15	Mar 1	Sep 1	-

FINANCIALS

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see [Funding for Graduate School](#), which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The [Financial Information](#) section of the Graduate Catalog is another key resource.

Fellowships

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see [Fellowships](#), which includes descriptions of UCF fellowships and what you should do to be considered for a fellowship.

Graduate Program

Alain Kassab PhD
Professor
gradmmao@ucf.edu
Telephone: 407-823-5778
Engineering 313 [Map](#)

Graduate Admissions

Admissions Counselor
gradadmissions@ucf.edu
Telephone: 407-823-2766 ext. 254
Millican Hall 230 [Map](#)
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[Graduate Admissions](#)
Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112
Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Graduate Fellowships

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LaVonda Walker
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www.graduate.ucf.edu

Appointment Line: 407-823-5285
Fax: 407-823-5241

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finaid@ucf.edu
<http://finaid.ucf.edu>

Review changes made to curriculum-----#10 on agenda

Mechanical Systems

TRACK DESCRIPTION

The Master of Science in Mechanical Engineering is primarily intended for students with a bachelor's degree in Mechanical or Aerospace engineering or a closely related discipline obtained from a recognized accredited institution. The program offers Computer-Aided Mechanical Engineering, Mechanical Systems, Miniature Engineering Systems, Professional, Thermofluids and Accelerated BS to MS tracks.

[Read More ▼▲](#)

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit www.intl.ucf.edu. If you have any questions, please consult the International Services Center at 407-823-2337.

CURRICULUM

Total Credit Hours Required:

30 Credit Hours Minimum beyond the Bachelor's Degree

All students must identify an adviser and file an official degree program of study prior to the completion of 9 credit hours of study. Students should consult with the MMAE Graduate Program Director for assistance in completing the program of study form. The program of study must have departmental approval and must include at least 24 credit hours of formal course work, exclusive of thesis and research. Furthermore, at least half of the credit hours must be from courses at the 6000 level. Substitutions to the program of study must meet with the approval of the adviser and the department.

A student with an undergraduate degree outside of the selected departmental discipline may be required to satisfy an articulation program and take additional prerequisites. More information is available from the MMAE departmental website listed above.

Prerequisites (or equivalent)

- Differential Equations (MAP 2302)
- Modeling Methods in Mechanical and Aerospace Engineering (EML 3034C)
- Machine Design and Analysis (EML 3500) or Flight and Structures (EAS 4200)

- Vibration Analysis (EML 4220) or Space Structural Dynamics (EAS 4210)
- Experimental Techniques in Mechanics and Materials (EMA 3012C) or Solid Mechanics Lab (EGM 3601L) or Mechanical Systems Experimental Techniques (EML 4221C)
- Feedback Control (EML 4312C)

Required Courses—12 Credit Hours

- EML 5060 Mathematical Methods in Mechanical, Materials, and Aerospace Engineering (3 credit hours)
- EML 5211 Continuum Mechanics (3 credit hours) Updated to EML 6211
- EML 5271 Intermediate Dynamics (3 credit hours)
- ~~EML 6067 Finite Elements in Mechanical, Materials and Aerospace Engineering I (3 credit hours)~~
- EML 5237 Intermediate Mechanics of Materials

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Elective Courses—12 Credit Hours

All students, both thesis and nonthesis, must take 12 credit hours of electives from the following list or from courses from other tracks. Electives should be chosen in consultation with the student's adviser.

- EML 6305C Experimental Mechanics (3 credit hours)
- EML 5311 System Control (3 credit hours)
- EML 5546 Engineering Design with Composite Materials (3 credit hours)
- EML 6068 Finite Elements in Mechanical and Aerospace Engineering II (3 credit hours)
- EML 6062 Boundary Element Methods in Engineering (3 credit hours)
- EML 6227 Nonlinear Vibrations (3 credit hours)
- EML 5026C Advanced Engineering Design Practice (3 credit hours)
- EML 5066 Computational Methods in Mechanical, Materials and Aerospace Engineering (3 credit hours)
- EML 5224 Acoustics (3 credit hours)
- EML 5228C Modal Analysis (3 credit hours)
- EML 5245 Tribology (3 credit hours)
- EML 5532C Computer-Aided Design for Manufacture (3 credit hours)
- EML 5572 Probabilistic Methods in Mechanical Design (3 credit hours)
- EML 6808 Analysis and Control of Robot Manipulators (3 credit hours)
- EML 6226 Analytical Dynamics (3 credit hours)
- EML 6233 Fundamentals in Fatigue Analysis (3 credit hours)
- EML 6547 Fracture Mechanics (3 credit hours)

Thesis Option—6 Credit Hours

Thesis students must complete an independent research project, and write and successfully defend a thesis describing the project. Students may not register for thesis credit hours until an advisory committee has been appointed and the committee has reviewed the program of study and the proposed thesis topic.

- EML 6971 Thesis (6 credit hours)

The College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's adviser and posted on the college's [website](#) and on the [Events Calendar](#) at the College of Graduate Studies website at least two weeks before the defense date.

Nonthesis Option—6 Credit Hours

Nonthesis students are required to take EML 6085 Research Methods in MMAE (or EML 6918 Directed Research, with approval) as part of their 30-credit-hour course requirement. In addition, nonthesis students must take another elective beyond the 12 credit hours of electives described above.

- EML 6085 Research Methods in MMAE (3 credit hours)*
- Elective (3 credit hours)

* For students who are not on campus and with prior approval from the graduate program director, EML 6918, Directed Research (3 credit hours) may be substituted as the student's independent learning experience. If the substitution of EML 6918 is approved, a letter must be provided by the faculty member agreeing to supervise the directed research and certifying that the experience includes independent learning.

Equipment Fee

Students in the Mechanical Engineering MSME program pay a \$90 equipment fee each semester that they are enrolled.

INDEPENDENT LEARNING

The Independent Learning requirement is met by successful completion of a master's thesis for the thesis option. The independent learning experience in the nonthesis option is provided by the required course, EML 6085 Research Methods in MMAE (3 credit hours). For students who are not on campus and with prior approval from the graduate program director, EML 6918 Directed Research (3 credit hours) may be substituted as the student's independent learning experience. If the substitution of EML 6918 is approved, a letter must be provided by the faculty member agreeing to supervise the directed research and certifying that the experience includes independent learning.

APPLICATION REQUIREMENTS

For information on general UCF graduate admissions requirements that apply to all prospective students, please visit the [Admissions](#) section of the Graduate Catalog. Applicants must [apply online](#). All requested materials must be submitted by the established deadline.

The College of Engineering and Computer Science strongly encourages prospective applicants to request a free pre-screening (www.cecs.ucf.edu/prescreen) of their qualifications prior to submitting an online application.

for graduate admission. However, a pre-screening is not required; rather, it is offered as a courtesy to all prospective applicants before they commit to submitting a complete online application and paying an application processing fee.

Admissions decisions are made on the basis of a complete online application only, and not on the basis of any pre-screening. Prospective applicants who are encouraged to apply to their intended graduate program based on the information provided for their pre-screening are not assured of admission or financial assistance when they submit a complete online application. Although it is possible, it is not likely, that prospective applicants who are discouraged from formally applying to a graduate program at the pre-screening stage will be admitted if they elect to submit a complete online application anyway.

In addition to the [general UCF graduate application requirements](#), applicants to this program must provide:

- One official transcript (in a sealed envelope) from each college/university attended.
- A bachelor's degree in Mechanical or Aerospace Engineering, or a closely related discipline.
- Résumé.
- Statement of educational, research, and professional career objectives.
- Applicants applying to this program who have attended a college/university outside the United States must provide a course-by-course credential evaluation with GPA calculation. Credential evaluations are accepted from [World Education Services \(WES\)](#) or [Josef Silny and Associates, Inc.](#) only.

Faculty members may choose to conduct face-to-face or telephone interviews before accepting an applicant into their research program.

Additional courses may be required to correct deficiencies. Applicants should contact the MMAE graduate program director for more information.

Application Deadlines

Mechanical Systems	Fall Priority	Fall	Spring	Summer
Domestic Applicants	Jan 15	Jul 15	Dec 1	-
International Applicants	Jan 15	Jan 15	Jul 1	-
International Transfer Applicants	Jan 15	Mar 1	Sep 1	-

FINANCIALS

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see [Funding for Graduate School](#), which describes the types of financial

assistance available at UCF and provides general guidance in planning your graduate finances. The [Financial Information](#) section of the Graduate Catalog is another key resource.

Fellowships

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see [Fellowships](#), which includes descriptions of UCF fellowships and what you should do to be considered for a fellowship.

Contact **INFO**

Graduate Program

Alain Kassab PhD

Professor

gradmmae@ucf.edu

Telephone: 407-823-5778

Engineering 313 [Map](#)

Graduate Admissions

Admissions Counselor

gradadmissions@ucf.edu

Telephone: 407-823-2766 ext. 254

Millican Hall 230 [Map](#)

[Online Application](#)

[Graduate Admissions](#)

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Millican Hall 230

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Orlando, FL 32816-0112

Institution Codes

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Graduate Fellowships

Sharon Preston

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Telephone: 407-823-0127

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Graduate Financial Aid

UCF Student Financial Assistance

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<http://finaid.ucf.edu>

Inactivation of track -----#5 on agenda

Miniature Engineering Systems

TRACK DESCRIPTION

The Master of Science in Mechanical Engineering is primarily intended for students with a bachelor's degree in Mechanical or Aerospace engineering or a closely related discipline obtained from a recognized accredited institution. The program offers Computer Aided Mechanical Engineering, Mechanical Systems, Miniature Engineering Systems, Professional, Thermofluids and Accelerated BS to MS tracks.

Read More ▾▲

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit www.intl.ucf.edu. If you have any questions, please consult the International Services Center at 407-823-2337.

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CURRICULUM

Total Credit Hours Required:

30 Credit Hours, Minimum beyond the Bachelor's Degree

All students must identify an adviser and file an official degree program of study prior to the completion of 9 credit hours of study. Students should consult with the MMAE Graduate Program Director for assistance in completing the program of study form. The program of study must have departmental approval and must include 24 hours of formal course work, exclusive of thesis and research. In addition, at least half of the credit hours must be from courses at the 6000 level. Substitutions to the program of study must meet with the approval of the adviser and the department.

A student with an undergraduate degree outside of the selected departmental discipline may be required to satisfy an articulation program and may have to take additional prerequisites. More information is available from the MMAE departmental website listed above.

Required Courses—12 Credit Hours

- EML 5060 Mathematical Methods in Mechanical, Materials and Aerospace Engineering (3 credit hours)
- EML 5290 Introduction to MEMS and Micromachining (3 credit hours)
- EML 6296 MEMS Mechanism and Design (3 credit hours)
- EML 5291 MEMS Materials (3 credit hours)

Elective Courses—12 Credit Hours

All students, both thesis and nonthesis, must take 12 credit hours of electives from the following list or from courses from other tracks. The electives should be chosen in consultation with the student's advisor.

- ~~EEE 6326C MEMS Fabrication Laboratory (3 credit hours) or EEE 5356C Fabrication of Solid-State Devices (3 credit hours)~~
- ~~EML 5292 Fundamental Phenomena and Scaling Laws in Miniature Engineering Systems (3 credit hours)~~
- ~~EML 6299 Advanced Topics on Miniaturization (3 credit hours)~~
- ~~EML 6297 MEMS Characterization (3 credit hours)~~
- ~~EML 6295 Sensors and Actuators for Micro Mechanical Systems (3 credit hours)~~
- ~~EML 5211 Continuum Mechanics (3 credit hours)~~
- ~~ECN 5858C Prototyping and Product Realization (3 credit hours)~~
- ~~EML 5271 Intermediate Dynamics (3 credit hours)~~
- ~~EML 5152 Intermediate Heat Transfer (3 credit hours)~~
- ~~EML 6712 Mechanics of Viscous Flow (3 credit hours)~~
- ~~EML 6155 Convective Heat Transfer (3 credit hours)~~
- ~~EML 5713 Intermediate Fluid Mechanics (3 credit hours)~~
- ~~EML 6725 Computational Fluid Dynamics (3 credit hours)~~
- ~~EML 6104 Classical Thermodynamics (3 credit hours)~~
- ~~EML 5402 Turbomachinery (3 credit hours)~~
- ~~EML 5532C Computer-Aided Design for Manufacture (3 credit hours)~~
- ~~EAS 5407 Mechatronics (3 credit hours)~~
- ~~EML 6157 Radiation Heat Transfer (3 credit hours)~~
- ~~EML 6233 Fundamentals of Fatigue Analysis (3 credit hours)~~
- ~~EML 5245 Tribology (3 credit hours)~~
- ~~EML 5311 System Control (3 credit hours)~~
- ~~EML 5105 Gas Kinetics and Statistical Thermodynamics (3 credit hours)~~
- ~~EEL 5625 Applied Control System (3 credit hours)~~
- ~~EML 5546 Engineering Design with Composite Materials (3 credit hours)~~
- ~~EML 6223 Advanced Vibrational Systems (3 credit hours)~~
- ~~EML 6067 Finite Elements in Mechanical, Materials and Aerospace Engineering I (3 credit hours)~~

Thesis Option—6 Credit Hours

~~Thesis students must complete an independent research project, and write and defend a thesis describing the project. Students may not register for thesis credit hours until an advisory committee has been appointed and the committee has reviewed the program of study and the proposed thesis topic.~~

- ~~EML 6071 Thesis (6 credit hours)~~

~~The College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's advisor and posted on the college's [website](#) and on the [Events Calendar](#) at the~~

College of Graduate Studies website at least two weeks before the defense date.

Nonthesis Option—6 Credit Hours

Nonthesis students are required to take EML 6085 Research Methods in MMAE (or EML 6018 Directed Research, with approval) as part of their 30-credit-hour course requirement. Furthermore, they must take an additional elective beyond the 12 credit hours of electives described above.

- EML 6085 Research Methods in MMAE (3 credit hours)*
- Elective (3 credit hours)

* For students who are not on campus and with prior approval from the graduate program director, EML 6018 Directed Research (3 credit hours) may be substituted as the student's independent learning experience. If the substitution of EML 6018 is approved, a letter must be provided by the faculty member agreeing to supervise the directed research and certifying that the experience includes independent learning.

Equipment Fee

Students in the Mechanical Engineering MSME program pay a \$90 equipment fee each semester that they are enrolled.

INDEPENDENT LEARNING

The Independent Learning requirement is met by successful completion of a master's thesis for the thesis option. The independent learning experience in the nonthesis option is provided by the required course, EML 6085 Research Methods in MMAE (3 credit hours). For students who are not on campus and with prior approval from the graduate program director, EML 6018 Directed Research (3 credit hours) may be substituted as the student's independent learning experience. If the substitution of EML 6018 is approved, a letter must be provided by the faculty member agreeing to supervise the directed research and certifying that the experience includes independent learning.

APPLICATION REQUIREMENTS

For information on general UCF graduate admissions requirements that apply to all prospective students, please visit the [Admissions](#) section of the Graduate Catalog. Applicants must [apply online](#). All requested materials must be submitted by the established deadline.

The College of Engineering and Computer Science strongly encourages prospective applicants to request a free pre-screening (www.cecs.ucf.edu/prescreen) of their qualifications prior to submitting an online application for graduate admission. However, a pre-screening is not required; rather, it is offered as a courtesy to all prospective applicants before they commit to submitting a complete online application and paying an application processing fee.

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In addition to the general UCF graduate application requirements, applicants to this program must provide:

- One official transcript (in a sealed envelope) from each college/university attended.
- A bachelor's degree in Mechanical or Aerospace Engineering, or a closely related discipline.
- Résumé.
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Faculty members may choose to conduct face-to-face or telephone interviews before accepting an applicant into their research program.

Additional courses may be required to correct deficiencies. Applicants should contact the MMAE graduate program director for more information.

Application Deadlines

Miniature Engineering Systems	Fall Priority	Fall	Spring	Summer
Domestic Applicants	Jan 15	Jul 15	Dec 1	-
International Applicants	Jan 15	Jan 15	Jul 1	-
International Transfer Applicants	Jan 15	Mar 1	Sep 1	-

FINANCIALS


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Fellowships

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see [Fellowships](#), which includes descriptions of UCF fellowships and what you should do to be considered for a fellowship.


Contact INFO

Graduate Program

Alain Kassab PhD
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Engineering 313 

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Graduate Admissions

Admissions Counselor
gradadmissions@ucf.edu
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Millican Hall 230 
[Online Application](#)
[Graduate Admissions](#)

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Mailing Address

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Graduate Financial Aid

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Fax: 407-823-5241
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<http://finaid.ucf.edu>

Inactivation of track -----#6 on agenda

Professional

TRACK DESCRIPTION

The Master of Science in Mechanical Engineering is primarily intended for students with a bachelor's degree in Mechanical or Aerospace engineering or a closely related discipline obtained from a recognized accredited institution. The program offers Computer Aided Mechanical Engineering, Mechanical Systems, Miniature Engineering Systems, Professional, Thermofluids and Accelerated BS to MS tracks. International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit www.intl.ucf.edu. If you have any questions, please consult the International Services Center at 407-823-2337.

CURRICULUM

Total Credit Hours Required:

30 Credit Hours Minimum beyond the Bachelor's Degree

All students must identify an adviser and file an official degree program of study prior to the completion of 9 credit hours of study. The program of study must have departmental approval and therefore students should consult with the MMAE Graduate Program Director for assistance in completing their program of study form. At least 24 hours of the program of study must include formal course work, exclusive of thesis and research, and at least half of the credit hours must be from courses at the 6000-level. Substitutions to the program of study must meet with the approval of the adviser and the department.

A student with an undergraduate degree outside of the selected departmental discipline may be required to satisfy an articulation program and take additional prerequisites. More information is available from the MMAE departmental website.

Prerequisites (or equivalent)

- Mathematics Differential Equations (MAP 2302)
- Modeling Methods in Mechanical and Aerospace Engineering (EML 3034C)
- Thermodynamics of Mechanical Systems (EML 3101)
- Structure and Properties of Materials (EGN 3365)
- Solid Mechanics (EGM 3601)

Required Courses—12 Credit Hours

- ~~EML 5060 Mathematical Methods in Mechanical, Materials, and Aerospace Engineering (3 credit hours)~~
- ~~EML 5211 Continuum Mechanics (3 credit hours)~~
- ~~EML 5271 Intermediate Dynamics (3 credit hours)~~
- ~~EML 6067 Finite Elements in Mechanical, Materials and Aerospace Engineering I (3 credit hours)~~

Elective Courses—12 Credit Hours

All students, both thesis and nonthesis, must take 12 credit hours of electives from the following list or from courses from other MMAE tracks. It is possible to take up to 6 credit hours of graduate courses from other departments in the College of Engineering and Computer Science. Students should confer with their adviser when choosing electives.

- ~~EML 5131 Combustion Phenomena (3 credit hours)~~
- ~~EML 5402 Turbomachinery (3 credit hours)~~
- ~~EML 5532C Computer-Aided Design for Manufacture (3 credit hours)~~
- ~~EML 6062 Boundary Element Methods in Engineering (3 credit hours)~~
- ~~EML 6155 Convection Heat Transfer (3 credit hours)~~
- ~~EML 6226 Analytical Dynamics (3 credit hours)~~
- ~~EML 6306C Experimental Mechanics (3 credit hours)~~
- ~~EML 6547 Engineering Fracture Mechanics in Design (3 credit hours)~~
- ~~EML 6712 Mechanics of Viscous Flow (3 credit hours)~~
- ~~EML 6725 Computational Fluid Dynamics and Heat Transfer I (3 credit hours)~~
- ~~EML 5026C Advanced Engineering Design Practice (3 credit hours)~~
- ~~EML 5105 Gas Kinetics and Statistical Thermodynamics (3 credit hours)~~
- ~~EAS 6138 Advanced Gas Dynamics (3 credit hours)~~
- ~~EAS 6185 Turbulent Flow (3 credit hours)~~
- ~~EML 5066 Computational Methods in Mechanical, Materials and Aerospace Engineering (3 credit hours)~~
- ~~EML 5131 Combustion Phenomena (3 credit hours)~~
- ~~EML 5152 Intermediate Heat Transfer (3 credit hours)~~
- ~~EML 5713 Intermediate Fluid Mechanics (3 credit hours)~~
- ~~EML 6068 Finite Elements in Mechanical, Materials, and Aerospace Engineering II (3 credit hours)~~
- ~~EML 6233 Fundamentals of Fatigue Analysis (3 credit hours)~~
- ~~EML 6726 Computational Fluid Dynamics and Heat Transfer II (3 credit hours)~~
- ~~EML 5237 Intermediate Mechanics of Materials (3 credit hours)~~
- ~~EML 5546 Engineering Design with Composite Materials (3 credit hours)~~

Thesis Option—6 Credit Hours

Thesis students must complete an independent research project, and write and defend a thesis describing the project. Students may not register for thesis credit hours until an advisory committee has been appointed and the committee has reviewed the program of study and the proposed thesis topic.

- [EML 6971 Thesis \(6 credit hours minimum\)](#)

The College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's advisor and posted on the college's [website](#) and on the [Events Calendar](#) at the College of Graduate Studies website at least two weeks before the defense date.

Nonthesis Option—6 Credit Hours

Nonthesis students must take EML 6085 Research Methods in MMAE (or EML 6018 Directed Research, with approval) as part of their 30-credit-hour course requirement. Furthermore, they must take an additional elective beyond the 12 credit hours of electives described above.

- [EML 6085 Research Methods in MMAE \(3 credit hours\)*](#)
- [Elective \(3 credit hours\)](#)

* For students who are not on campus and with prior approval from the graduate program director, EML 6018, Directed Research (3 credit hours) may be substituted as the student's independent learning experience. If the substitution of EML 6018 is approved, a letter must be provided by the faculty member agreeing to supervise the directed research and certifying that the experience will include independent learning.

Equipment Fee

Students in the Mechanical Engineering MSME program pay a \$90 equipment fee each semester that they are enrolled.

INDEPENDENT LEARNING

The Independent Learning requirement is met by successful completion of a master's thesis for the thesis option. The independent learning experience in the nonthesis option is provided by the required course, EML 6085 Research Methods in MMAE (3 credit hours). For students who are not on campus and with prior approval from the graduate program director, EML 6018 Directed Research (3 credit hours) may be substituted as the student's independent learning experience. If the substitution of EML 6018 is approved, a letter must be provided by the faculty member agreeing to supervise the directed research and certifying that the experience includes independent learning.

APPLICATION REQUIREMENTS

For information on general UCF graduate admissions requirements that apply to all prospective students, please visit the [Admissions](#) section of the Graduate Catalog. Applicants must [apply online](#). All requested materials must be submitted by the established deadline.

The College of Engineering and Computer Science strongly encourages prospective applicants to request a free pre-screening (www.cecs.ucf.edu/prescreen) of their qualifications prior to submitting an online application.

for graduate admission. However, a pre-screening is not required; rather, it is offered as a courtesy to all prospective applicants before they commit to submitting a complete online application and paying an application processing fee.

Admissions decisions are made on the basis of a complete online application only, and not on the basis of any pre-screening. Prospective applicants who are encouraged to apply to their intended graduate program based on the information provided for their pre-screening are not assured of admission or financial assistance when they submit a complete online application. Although it is possible, it is not likely, that prospective applicants who are discouraged from formally applying to a graduate program at the pre-screening stage will be admitted if they elect to submit a complete online application anyway.

In addition to the general UCF graduate application requirements, applicants to this program must provide:

- One official transcript (in a sealed envelope) from each college/university attended.
- A bachelor's degree in Mechanical or Aerospace Engineering, or a closely related discipline.
- Résumé.
- Statement of educational, research, and professional career objectives.
- Applicants applying to this program who have attended a college/university outside the United States must provide a course-by-course credential evaluation with GPA calculation. Credential evaluations are accepted from World Education Services (WES) or Josef Silny and Associates, Inc. only.

Faculty members may choose to conduct face-to-face or telephone interviews before accepting an applicant into their research program.

Additional courses may be required to correct deficiencies. Applicants should contact the MMAE graduate program director for more information.

Application Deadlines

Professional	Fall Priority	Fall	Spring	Summer
Domestic Applicants	Jan 15	Jul 15	Dec 1	-
International Applicants	Jan 15	Jan 15	Jul 1	-
International Transfer Applicants	Jan 15	Mar 1	Sep 1	-

FINANCIALS

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see Funding for Graduate School, which describes the types of financial


assistance available at UCF and provides general guidance in planning your graduate finances. The [Financial Information](#) section of the Graduate Catalog is another key resource.

Fellowships


Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see [Fellowships](#), which includes descriptions of UCF fellowships and what you should do to be considered for a fellowship.

Contact INFO

Graduate Program

Alain Kassab PhD
Professor
gradmmae@ucf.edu
Telephone: 407-823-5778
Engineering 313 

Graduate Admissions

Admissions Counselor
gradadmissions@ucf.edu
Telephone: 407-823-2766 ext. 254
Millican Hall 230 
[Online Application](#)
[Graduate Admissions](#)

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-68
TOEFL: 5233
ETS PPI: 5233

Graduate Fellowships

Sharon Preston
Telephone: 407-823-6497
LaVonda Walker
Telephone: 407-823-0127
gradfellowship@ucf.edu
www.graduate.ucf.edu

Graduate Financial Aid

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827

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Formatted: Font: (Default) Arial, 9 pt, Font color: Custom Color(0,153,153))

Appointment Line: 407-823-5285

Fax: 407-823-5244

finaid@ucf.edu

<http://finaid.ucf.edu>

No changes to curriculum ----

Thermofluids

TRACK DESCRIPTION

The Master of Science in Mechanical Engineering is primarily intended for students with a bachelor's degree in Mechanical or Aerospace engineering or a closely related discipline obtained from a recognized accredited institution.

[Read More ▼▲](#)

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit www.intl.ucf.edu. If you have any questions, please consult the International Services Center at 407-823-2337.

CURRICULUM

Total Credit Hours Required:

30 Credit Hours Minimum beyond the Bachelor's Degree

All students must identify an adviser and file an official degree program of study prior to the completion of 9 credit hours of study. The program of study must have departmental approval and students should consult with the MMAE Graduate Program Director for assistance in completing their program of study form. At least 24 hours of the program of study must include formal course work, exclusive of thesis and research, and at least half of the credit hours must be from courses at the 6000 level. Substitutions to the program of study must meet with the approval of the adviser and the department.

A student with an undergraduate degree outside of the selected departmental discipline may be required to satisfy an articulation program and take additional prerequisites. More information is available from the MMAE departmental website listed above.

Prerequisites (or equivalent)

- Differential Equations (MAP 2302)
- Modeling Methods in Mechanical and Aerospace Engineering (EML 3034C)
- Thermodynamics of Mechanical Systems (EML 3101)
- Measurements in Thermal Systems (EML 4304C)
- Fluid Mechanics II (EML 4703) or Propulsion Systems (EAS 4300)
- Heat Transfer (EML 4142)

Required Courses—12 Credit Hours

- EML 5060 Mathematical Methods in Mechanical, Materials and Aerospace Engineering (3 credit hours)
- EML 5152 Intermediate Heat Transfer (3 credit hours)
- EML 5713 Intermediate Fluid Mechanics (3 credit hours)
- EML 6104 Classical Thermodynamics (3 credit hours)

Elective Courses—12 Credit Hours

All students, both thesis and nonthesis, must take 12 credit hours of electives from the following list or from courses from other MMAE tracks. Up to 6 credit hours of electives could also be from other graduate courses offered in the College of Engineering and Computer Science. Students should confer with their advisers when choosing electives.

- EML 5402 Turbomachinery (3 credit hours)
- EML 6155 Convection Heat Transfer (3 credit hours)
- EML 6157 Radiation Heat Transfer (3 credit hours)
- EML 6725 Computational Fluid Dynamics and Heat Transfer I (3 credit hours)
- EML 5131 Combustion Phenomena (3 credit hours)
- EML 6154 Conduction Heat Transfer (3 credit hours)
- EAS 6185 Turbulent Flow (3 credit hours)
- EML 6712 Viscous Flow (3 credit hours)
- EAS 6138 Advanced Gas Dynamics (3 credit hours)
- EAS 5302 Direct Energy Conversion (3 credit hours)
- EAS 5315 Rocket Propulsion (3 credit hours)
- EML 5026C Advanced Engineering Design Practice (3 credit hours)
- EML 5066 Computational Methods in Mechanical, Materials and Aerospace Engineering (3 credit hours)
- EML 5105 Gas Kinetics and Statistical Thermodynamics (3 credit hours)
- EML 6062 Boundary Element Methods in Engineering (3 credit hours)
- EML 6124 Two-Phase Flow (3 credit hours)
- EML 6158 Gaseous Radiation Heat Transfer (3 credit hours)
- EML 6144 Boiling and Condensation Heat Transfer (3 credit hours)
- EML 6726 Computational Fluid Dynamics and Heat Transfer II (3 credit hours)

Thesis Option—6 Credit Hours

Thesis students must complete an independent research project, and write and defend a thesis describing the project. Students may not register for thesis credit hours until an advisory committee has been appointed and the committee has reviewed the program of study and the proposed thesis topic.

- EML 6971 Thesis (6 credit hours minimum)

The College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's adviser and posted on the CECS [website](#) and on the [Events Calendar](#) at the College of Graduate Studies website at least two weeks before the defense date.

Nonthesis Option—6 Credit Hours

Nonthesis students must take EML 6085 Research Methods in MMAE (or EML 6918 Directed Research, with approval) as part of their 30-credit-hour course requirement. Furthermore, they must take an additional elective beyond the 12 credit hours of electives described above.

- EML 6085 Research Methods in MMAE (3 credit hours)*
- Elective (3 credit hours)

* For students who are not on campus and with prior approval from the graduate program director, EML 6918, Directed Research (3 credit hours) may be substituted as the student's independent learning experience. If the substitution of EML 6918 is approved, a letter must be provided by the faculty member agreeing to supervise the directed research and certifying that the experience contains independent learning.

Equipment Fee

Students in the Mechanical Engineering MSME program pay a \$90 equipment fee each semester that they are enrolled.

INDEPENDENT LEARNING

The Independent Learning requirement is met by successful completion of a master's thesis for the thesis option. The independent learning experience in the nonthesis option is provided by the required course, EML 6085 Research Methods in MMAE (3 credit hours). For students who are not on campus and with prior approval from the graduate program director, EML 6918 Directed Research (3 credit hours) may be substituted as the student's independent learning experience. If the substitution of EML 6918 is approved, a letter must be provided by the faculty member agreeing to supervise the directed research and certifying that the experience includes independent learning.

APPLICATION REQUIREMENTS

For information on general UCF graduate admissions requirements that apply to all prospective students, please visit the [Admissions](#) section of the Graduate Catalog. Applicants must [apply online](#). All requested materials must be submitted by the established deadline.

The College of Engineering and Computer Science strongly encourages prospective applicants to request a free pre-screening (www.cecs.ucf.edu/prescreen) of their qualifications prior to submitting an online application for graduate admission. However, a pre-screening is not required; rather, it is offered as a courtesy to all

prospective applicants before they commit to submitting a complete online application and paying an application processing fee.

Admissions decisions are made on the basis of a complete online application only, and not on the basis of any pre-screening. Prospective applicants who are encouraged to apply to their intended graduate program based on the information provided for their pre-screening are not assured of admission or financial assistance when they submit a complete online application. Although it is possible, it is not likely, that prospective applicants who are discouraged from formally applying to a graduate program at the pre-screening stage will be admitted if they elect to submit a complete online application anyway.

In addition to the [general UCF graduate application requirements](#), applicants to this program must provide:

- One official transcript (in a sealed envelope) from each college/university attended.
- A bachelor's degree in Mechanical or Aerospace Engineering, or a closely related discipline.
- Résumé.
- Statement of educational, research, and professional career objectives.
- Applicants applying to this program who have attended a college/university outside the United States must provide a course-by-course credential evaluation with GPA calculation. Credential evaluations are accepted from [World Education Services \(WES\)](#) or [Josef Silny and Associates, Inc.](#) only.

Faculty members may choose to conduct face-to-face or telephone interviews before accepting applicants into their research program.

Additional courses may be required to correct deficiencies. Applicants should contact the MMAE graduate program director for more information.

Application Deadlines

Thermofluids	Fall Priority	Fall	Spring	Summer
Domestic Applicants	Jan 15	Jul 15	Dec 1	-
International Applicants	Jan 15	Jan 15	Jul 1	-
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FINANCIALS

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see [Funding for Graduate School](#), which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The [Financial Information](#) section of the Graduate Catalog is another key resource.

Fellowships

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see [Fellowships](#), which includes descriptions of UCF fellowships and what you should do to be considered for a fellowship.

Contact **INFO**

Graduate Program

Alain Kassab PhD

Professor

gradmmae@ucf.edu

Telephone: 407-823-5778

Engineering 313 [Map](#)

Graduate Admissions

Admissions Counselor

gradadmissions@ucf.edu

Telephone: 407-823-2766 ext. 254

Millican Hall 230 [Map](#)

[Online Application](#)

[Graduate Admissions](#)

Mailing Address

UCF College of Graduate Studies

Millican Hall 230

PO Box 160112

Orlando, FL 32816-0112

Institution Codes

GRE: 5233

GMAT: RZT-HT-58

TOEFL: 5233

ETS PPI: 5233

Graduate Fellowships

Sharon Preston

Telephone: 407-823-6497

LaVonda Walker

Telephone: 407-823-0127

gradfellowship@ucf.edu

www.graduate.ucf.edu

Graduate Financial Aid

UCF Student Financial Assistance

Millican Hall 120

Telephone: 407-823-2827

Appointment Line: 407-823-5285

Fax: 407-823-5241

finaid@ucf.edu

<http://finaid.ucf.edu>



Program Recommendation Form

This form is to be used to revise, add, suspend, or delete degree programs, tracks, or certificate programs. If there are changes to a program and the changes will affect the program tracks also, one form may be used for this type of change.

PLEASE NOTE: The deadline for new tracks or certificates is **February 1 of each year**. Any proposal for new tracks or certificates received after this date will not be included in the next year's catalog. Revisions to existing programs, tracks, or certificates are **due by March 15**. Any proposals for revisions received after that date will not be included in the next year's catalog. Please include catalog copy (description, curriculum, contact information, application requirements, and application deadlines). For revisions – attach the catalog copy showing changes (use Track Changes in Word).

College/Unit(s) Submitting Proposal: College of Sciences

Proposed Effective Term/Year: Fall 2012

Unit(s) Housing Program: Department of Mathematics

Name of program, track and/or certificate: Industrial Mathematics Track in Mathematical Science MS

Brief description of program (this description will show up in the graduate catalog copy): *Do not add complete catalog copy here.*

Align the nonthesis option with the thesis option in total credit hours of 30 (by reducing the nonthesis from 36 to 30).
Change from five required courses to a selection of five from a list of courses, meeting the diverse needs from the students in this track.

DELIVERY - Will program be delivered: ☐ Face to face ☐ Completely online ☒ Mixed delivery

Admissions deadlines: (Please specify if you have a different deadline for the track than for the program?)

Application requirements: (Please specify if you have different application requirements for the track than for the program? Will you admit directly to the track?)

Program Director(s) and contact information: (name, email, phone, campus address, program website address)

Xin Li, xli@math.ucf.edu, 3-5984, MAP 212, www.math.ucf.edu/certificate/

Please check one: this action affects a: ☐ Program ☒ Track ☐ Certificate

Please check one: this action is a(n):

☐ Addition. Please proceed to Part A.

☒ Revision. If a revision applies to multiple tracks, please list them here and then proceed to Part A:

☐ Inactivation

☐ Temporary Suspension of Admissions. Give Length of Suspension:

Temporary suspension of admissions: The program will be removed from the online application. A notation will be entered in the graduate catalog indicating the length of the suspension of admissions. Currently enrolled students will not experience any issues with continued enrollment.

Inactivation: Admissions will be suspended for new students and the program will be removed from the online application. Students active in the program are eligible to complete the program under the appropriate criteria and an appropriate teach-out plan is required. The program will be removed from the catalog as of the approved term.

If you checked inactivation or you are temporarily suspending admissions, please go to Part B and complete it.

Signature Page

RECOMMENDATIONS

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Department Chair: <u>[Signature]</u>	<small>Digitally signed by Teresa Domains DN: cn = Teresa Domains, o = University of Central Florida, ou = COS Dean's Office, email = teresa.domains@ucf.edu, c = US</small>	Date: <u>1/20/12</u>
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	College Curriculum Committee Chair: <u>[Signature]</u>		Date: <u>2/13/12</u>
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	College Dean: <u>[Signature]</u>		Date: <u>2/14/12</u>
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Chair or GSC: _____		Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Dean, College of Graduate Studies: _____		Date: _____

APPROVAL

Provost and Executive Vice President: _____ Date: _____

Distribution: After approval is received from the Provost, distribution will be to:

Department(s); College; Registrar; Associate Registrar; Institutional Research; Academic Services; Faculty Senate;
University Analysis and Planning Support; College of Graduate Studies

Part A – For additions or revisions of programs, tracks or certificates

Brief statement of rationale: (Please indicate the rationale, how it affects the unit and faculty teaching in and students enrolled in the program, track or certificate.)

Currently, the nonthesis option requires a total of 36 credit hours while the thesis option requires 30. Our regular MS also requires 30 credit hours. So, we propose to reduce the nonthesis option in this track to 30 credit hours.

To increase the flexibility of the program, we propose to allow students to choose 5 courses from a list of courses for the required courses, instead of requiring a fixed set of 5 required courses.

For Revisions:

Brief listing of Program Changes: (Please indicate the changes in bullet format. If there are changes to the credit hours of the program, required courses or other requirements, please state those changes. **Remember to attach the catalog copy showing changes, using Track Changes in Word.**)

1. Reduce the nonthesis total credit to 30.
2. Added a list of courses from which students may select for their 5 required courses.

Will students be moved from an existing program, track, or certificate into this new program, track, or certificate?

☐ Yes ☒ No

If yes, state the name of the program or track where students are currently enrolled and provide a list of students if possible:

Will students have the option to stay in their existing program, track, or certificate? ☒ Yes ☐ No

Name Change

Are you changing the name of an existing program, track, or certificate? ☐ Yes ☐ No

If yes, provide the new name of the program, track, or certificate:

Provide the name of the current program, track, or certificate:

When is the name change effective? Please note: A name change will apply to the record of all students who are currently enrolled, readmitted or newly admitted into this program as of the effective date of this change.

Will students have the option to stay in their existing program, track, or certificate? ☒ Yes ☐ No

If you are requesting a CIP Code change for an existing program, track, or certificate, please provide:

old CIP:

new CIP:

If a name change is your only revision, stop here. Otherwise, complete the rest of Part A.

Part A - Continued

Specify the faculty who will participate in the program, track or certificate and their credentials to do so: (List faculty and a brief paragraph of their credentials.)

Impact of changes on students: Will current students be impacted by the addition or revision of a program, track or certificate? If so, how?

All current students may select to stay in their current catalog year.

If applicable, provide a written agreement (email is fine) from all involved units that they are in support of, will provide courses to, or will participate in the program, track, or certificate. Please attach the correspondence and also list the units here.

If an addition, provide a statement of who is likely to enroll and why. Please state if there is licensure or certification that depends upon this education, etc. Also, complete the following table.

	Year 1	Year 2	Year 3
Headcount			
SCHs			

If an addition, indicate likely career or student outcomes upon completion: (What will students do? What will their job titles be?)

Part A - Continued

If an addition or there are substantial REVISIONS to existing tracks or certificates, please complete the following table on financial support: (Specify all forms of support – assistantships, fellowships, and tuition remission.)

	No. assistantship students	Source of funds	No. fellowship students (specify fellowship)	No. tuition remissions	Source of funds
Year 1					
Year 2					
Year 3					

Checklist of items to be provided:

- ☐ Electronic graduate catalog copy for additions; track changes included if there are revisions. (required)
- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ Emails showing consultation with other units. (if applicable)
- ☐ If an addition, list of 1-3 students and 1-3 faculty for profiles in the graduate catalog (provide email address so Graduate Studies can contact them to write profiles and take photos). You may provide draft copy of profiles if you wish.
- ☐ If an addition, what disciplines does this program, track or certificate belong to? What other UCF graduate programs, tracks, or certificates are related to it? This information will be used to provide additional links for prospective students to search in the online graduate catalog.

Part B – For inactivations or suspensions of programs, tracks, or certificates

Are students currently enrolled in the program? ☐ Yes ☐ No

If yes, number of current students:

Please specify the intended time period of inactivation or suspension:

If program, track, or certificate is being inactivated or suspended, then attach a "teach out" plan for all current students specifying how they can finish the program or where students will be placed if moving to another program. The "teach out" plan should specify when courses will be offered to enable students to finish. Specify whether students will remain in the existing program to finish, and if so, when the completion date will be, whether students will be moved to another program, etc. Please provide a list of students where applicable.

--

Sample teach out plan: Enter the terms and courses that will be taught for each term throughout the last semester. Please delete course prefixes and numbers in this section if no teach out plan is required.

Fall 2010	Spring 2011	Summer 2011	Fall 2011	Spring 2012

Checklist of items to be provided:

- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ E-mails showing consultation with other units. (if applicable)

TRACK DESCRIPTION

The Industrial Mathematics track in the Mathematical Science MS program prepares graduate students to pursue careers in industry by providing them with high quality professional training in branches of mathematics valuable to high-technology industry.

[Read More](#) ▼▲

CURRICULUM

Total Credit Hours Required:

30–36 Credit Hours Minimum beyond the Bachelor's Degree

Thesis or nonthesis options are offered within the program. The thesis option consists of 30 credit hours of courses and thesis research while the nonthesis option consists of 30 credit hours of courses and a comprehensive exam. In either option, students will work with an adviser to design a program of study. A program of study is presented to either the Graduate Curriculum Committee or the program director for approval. If a student has an industry sponsor, the student's program of study will be developed in consultation with a representative from his sponsoring company. Students are expected to obtain hands-on experience by working at sponsoring companies during summer semesters.

At least one-half of the program courses must be taken at the 6000 level.

Prerequisites

The following courses are required as prerequisites to this track: Calculus with Analytic Geometry I, II, and III; Differential Equations; Elementary Linear and Matrix Algebra (or a course equivalent); Numerical Calculus (or a course equivalent); and Statistics.

Required Courses—15 Credit Hours

Students should take five courses from the following courses.

- MAP 6407 Applied Mathematics I (3 credit hours)
- MAP 5117 Mathematical Modeling (3 credit hours)
- MAP 6385 Applied Numerical Mathematics (3 credit hours)
- MAP 6111 Mathematical Statistics (3 credit hours)
- MAT 5712 Scientific Computing (3 credit hours)
- MAA 5210 Topics in Advanced Calculus (3 credit hours)
- MAS 5145 Advanced Linear Algebra & Matrix Theory (3 credit hours)
- MAA 6405 Complex Variables (3 credit hours)
- MAP 5336 Ordinary Differential Equations and Applications (3 credit hours)
- MAA 5228 Analysis I (3 credit hours)

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Elective Courses—9 Credit Hours

Electives should be chosen in consultation with the graduate program director and the student's adviser. A listing of the Department of Mathematics courses can be found in the Catalog Menu above.

Thesis Option—6 Credit Hours

It is recommended that the thesis topics have potential for industrial applications. An oral defense of the thesis will be required.

Nonthesis Option—~~6~~42 Credit Hours

Nonthesis students will take an additional ~~6~~42 credit hours of electives. Electives should be chosen in consultation with the graduate program director and the student's adviser. A comprehensive exam is required of nonthesis students.

Comprehensive Exam

The comprehensive examination will be given in the final semester of the student's program of study, based on the program of study. The examination will be on the required courses with the exclusion of Scientific Computing. The examination will be supervised by a committee composed of the adviser and at least two other faculty members from the Department of Mathematics. A pass/fail grade is given on the examination; and it may be repeated twice if necessary. The comprehensive examination requirement can be satisfied by passing the Ph.D. qualifying examination at the MS level.



Program Recommendation Form

This form is to be used to revise, add, suspend, or delete degree programs, tracks, or certificate programs. If there are changes to a program and the changes will affect the program tracks also, one form may be used for this type of change.

PLEASE NOTE: The deadline for new tracks or certificates is **February 1 of each year**. Any proposal for new tracks or certificates received after this date will not be included in the next year's catalog. Revisions to existing programs, tracks, or certificates are **due by March 15**. Any proposals for revisions received after that date will not be included in the next year's catalog. Please include catalog copy (description, curriculum, contact information, application requirements, and application deadlines). For revisions – attach the catalog copy showing changes (use **Track Changes in Word**).

College/Unit(s) Submitting Proposal: Arts & Humanities/School of Visual Arts & Design

Proposed Effective Term/Year: 2012-2013 Catalog

Unit(s) Housing Program: School of Visual Arts & Design

Name of program, track and/or certificate: Emerging Media MFA, Digital Media Track

Brief description of program (this description will show up in the graduate catalog copy): *Do not add complete catalog copy here.*

The Master of Fine Arts in Emerging Media offers a Digital Media track designed to educate the next generation of filmmakers and media entrepreneurs and produce artists, entrepreneurs, educators, engineers, and scientists who use digital technologies to create content in many venues (film, digital media, interactive entertainment, and a host of others), and who will develop and use digital technologies in new ways.

DELIVERY - Will program be delivered: ☐ Face to face ☐ Completely online ☒ Mixed delivery

Admissions deadlines: (Please specify if you have a different deadline for the track than for the program?)

No changes

Application requirements: (Please specify if you have different application requirements for the track than for the program? Will you admit directly to the track?)

No changes

Program Director(s) and contact information: (name, email, phone, campus address, program website address)

Philip Peters, philip.peters@ucf.edu, 407-823-0091, 500 W. Livingston, Orlando, FL 32801.

www.svad.ucf.edu

Please check one: this action affects a: ☐ Program ☒ Track ☐ Certificate

Please check one: this action is a(n):

☐ Addition. Please proceed to Part A.

☒ Revision. If a revision applies to multiple tracks, please list them here and then proceed to Part A:

☐ Inactivation

☐ Temporary Suspension of Admissions. Give Length of Suspension:

Temporary suspension of admissions: The program will be removed from the online application. A notation will be entered in the graduate catalog indicating the length of the suspension of admissions. Currently enrolled students will not experience any issues with continued enrollment.

Inactivation: Admissions will be suspended for new students and the program will be removed from the online application. Students active in the program are eligible to complete the program under the appropriate criteria and an appropriate teach-out plan is required. The program will be removed from the catalog as of the approved term.

If you checked inactivation or you are temporarily suspending admissions, please go to Part B and complete it.

Signature Page

RECOMMENDATIONS

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Department Chair: <u>Paul Lant</u>	Date: <u>1-20-12</u>
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	College Curriculum Committee Chair: _____	Date: <u>2/6/12</u>
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	College Dean: <u>James R. Connelley</u>	Date: <u>2/6/12</u>
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Chair or GSC: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Dean, College of Graduate Studies: _____	Date: _____

APPROVAL

Provost and Vice President for Academic Affairs: _____ Date: _____

Distribution: After approval is received from the Provost, distribution will be to:

Department(s); College; Registrar; Associate Registrar; Institutional Research; Academic Services; Faculty Senate;
University Analysis and Planning Support; College of Graduate Studies

Part A – For additions or revisions of programs, tracks or certificates

Brief statement of rationale: (Please indicate the rationale, how it affects the unit and faculty teaching in and students enrolled in the program, track or certificate.)

We need to remove a course from the core that is no longer offered, but we wanted to make sure we replaced the course with another required course so as not to weaken the core of the program.

For Revisions:

Brief listing of Program Changes: (Please indicate the changes in bullet format. If there are changes to the credit hours of the program, required courses or other requirements, please state those changes. **Remember to attach the catalog copy showing changes, using Track Changes in Word.**)

Remove DIG 6550 Digital Media Pre Production (3 credit hours) in the Required Courses section, replace with DIG 6605 Physical Computing (3 credit hours).

Will students be moved from an existing program, track, or certificate into this new program, track, or certificate?

☐ Yes ☒ No

If yes, state the name of the program or track where students are currently enrolled and provide a list of students if possible:

Will students have the option to stay in their existing program, track, or certificate? ☒ Yes ☐ No

Name Change

Are you changing the name of an existing program, track, or certificate? ☐ Yes ☒ No

If yes, provide the new name of the program, track, or certificate:

Provide the name of the current program, track, or certificate:

Emerging Media MFA, Digital Media Track

When is the name change effective? Please note: A name change will apply to the record of all students who are currently enrolled, readmitted or newly admitted into this program as of the effective date of this change.

Will students have the option to stay in their existing program, track, or certificate? ☒ Yes ☐ No

If you are requesting a CIP Code change for an existing program, track, or certificate, please provide:

old CIP:

new CIP:

If a name change is your only revision, stop here. Otherwise, complete the rest of Part A.

Part A - Continued

Specify the faculty who will participate in the program, track or certificate and their credentials to do so: (List faculty and a brief paragraph of their credentials.)

No faculty changes are required.

Impact of changes on students: Will current students be impacted by the addition or revision of a program, track or certificate? If so, how?

Students will have more elective options.

If applicable, provide a written agreement (email is fine) from all involved units that they are in support of, will provide courses to, or will participate in the program, track, or certificate. Please attach the correspondence and also list the units here.

If an addition, provide a statement of who is likely to enroll and why. Please state if there is licensure or certification that depends upon this education, etc. Also, complete the following table.

	Year 1	Year 2	Year 3
Headcount			
SCHs			

If an addition, indicate likely career or student outcomes upon completion: (What will students do? What will their job titles be?)

Part A - Continued

If an addition or there are substantial REVISIONS to existing tracks or certificates, please complete the following table on financial support: (Specify all forms of support – assistantships, fellowships, and tuition remission.)

	No. assistantship students	Source of funds	No. fellowship students (specify fellowship)	No. tuition remissions	Source of funds
Year 1					
Year 2					
Year 3					

Checklist of items to be provided:

- ☒ Electronic graduate catalog copy for additions; track changes included if there are revisions. (required)
- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ Emails showing consultation with other units. (if applicable)
- ☐ If an addition, list of 1-3 students and 1-3 faculty for profiles in the graduate catalog (provide email address so Graduate Studies can contact them to write profiles and take photos). You may provide draft copy of profiles if you wish.
- ☐ If an addition, what disciplines does this program, track or certificate belong to? What other UCF graduate programs, tracks, or certificates are related to it? This information will be used to provide additional links for prospective students to search in the online graduate catalog.

Part B – For inactivations or suspensions of programs, tracks, or certificates

Are students currently enrolled in the program? ☐ Yes ☐ No

If yes, number of current students:

Please specify the intended time period of inactivation or suspension:

If program, track, or certificate is being inactivated or suspended, then attach a “teach out” plan for all current students specifying how they can finish the program or where students will be placed if moving to another program. The “teach out” plan should specify when courses will be offered to enable students to finish. Specify whether students will remain in the existing program to finish, and if so, when the completion date will be, whether students will be moved to another program, etc. Please provide a list of students where applicable.

Sample teach out plan: Enter the terms and courses that will be taught for each term throughout the last semester. **Please delete course prefixes and numbers in this section if no teach out plan is required.**

Fall 2010	Spring 2011	Summer 2011	Fall 2011	Spring 2012

Checklist of items to be provided:

- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ E-mails showing consultation with other units. (if applicable)

School of Visual Arts & Design: Emerging Media MFA, Digital Media track change requests
Contact: Phil Peters, Program Coordinator, Philip.Peters@ucf.edu

TRACK DESCRIPTION

The Master of Fine Arts in Emerging Media offers a Digital Media track designed to educate the next generation of filmmakers and media entrepreneurs and produce artists, entrepreneurs, educators, engineers, and scientists who use digital technologies to create content in many venues (film, digital media, interactive entertainment, and a host of others), and who will develop and use digital technologies in new ways.

[Read More](#)

CURRICULUM

Total Credit Hours Required:

60 Credit Hours Minimum beyond the Bachelor's Degree

The Digital Media track in the Emerging Media MFA program requires a minimum of 60 credit hours including a thesis project. The program requires 32 credit hours of required courses, 18 credit hours of program electives, and 10 credit hours of thesis.

During the first academic year, the student pursues required courses as dictated by the student's plan of study. Throughout the second year, the student finishes remaining required course work and enrolls in electives approved by his or her thesis chairperson/adviser. During the third year, the student's focus is on completing his or her thesis work.

Required Courses—30 Credit Hours

- DIG 6647 Science and Technology of Dynamic Media (3 credit hours)
- DIG 6825 Digital Media Research Methods (3 credit hours)
- DIG 6546 Previsualization and Concept Development (3 credit hours)
- DIG 6432 Transmedia Story Creation (3 credit hours)
- DIG 6551 Applied Interactive Story (3 credit hours)
- DIG 6136 Design for Media (3 credit hours)
- DIG 5137 Information Architecture (3 credit hours)
- DIG 5487 Principles of Visual Language (3 credit hours)
- ~~DIG 6550 Digital Media Pre-Production (3 credit hours)~~ [DIG 6605 Physical Computing \(3 credit hours\)](#)
- DIG 6918 Directed Research (3 credit hours)

Comment [KR1]: Remove and replace with DIG 6605 Physical Computing

Elective Courses—18 Credit Hours

Many graduate-level courses in the College of Arts and Humanities can be used as electives, based on an adviser-approved plan of study. In addition, other graduate courses may be used in place of those listed above, with permission of the adviser. These courses must be selected so as to ensure that at least one-half of the courses in the student's plan of study are taken at the 6000

School of Visual Arts & Design: Emerging Media MFA, Digital Media track change requests
Contact: Phil Peters, Program Coordinator, Philip.Peters@ucf.edu

level. Normally, at least half of the selected electives should be taken with the School of Visual Arts and Design.

A listing of courses offered can be found in the drop-down Catalog Menu at the top of the page under "Courses."

Thesis—12 Credit Hours

- DIG 6971 Thesis (12 credit hours)

Each candidate for the Master of Fine Arts must submit a thesis proposal and preliminary bibliography on a topic selected in consultation with the adviser. The formal thesis is initiated by the preparation of a proposal that will meet both departmental and university requirements for the thesis. Prior to enrollment into thesis, the adviser, in consultation with the student, will designate a Thesis Committee to be further approved by the Dean of Arts and Humanities or their designee. This committee is chaired by the adviser and includes two or more additional faculty members from the School of Visual Arts and Design.

The members of the student's thesis committee will judge the proposal as the preliminary step to beginning the thesis. This committee must approve the Thesis Proposal before academic credit can accrue.

The thesis project for the Emerging Media MFA, Digital Media track involves creating innovative applications of digital media to serve artistic, entertainment, commercial, and/or educational needs. The thesis consists of three parts: (1) the creative project (that utilizes digital media); (2) the production journal (documenting the process of developing the project and evaluating its effectiveness); and (3) dissemination (the work is submitted in a juried exhibition, a refereed publication, or other venue that demonstrates development in connection with a professional partner).

The production journal portion of the thesis is a formal written document. The introduction cites similar, related, and antecedent work; the body explains the purposes of the project, the method of its production, and any evaluation that was performed; and it concludes with plans for future work. The thesis will also include an archival copy of the resulting creative product. Both the thesis and the creative product must be delivered in a digital form, acceptable by the UCF library according to its standards for digital dissertations and theses.

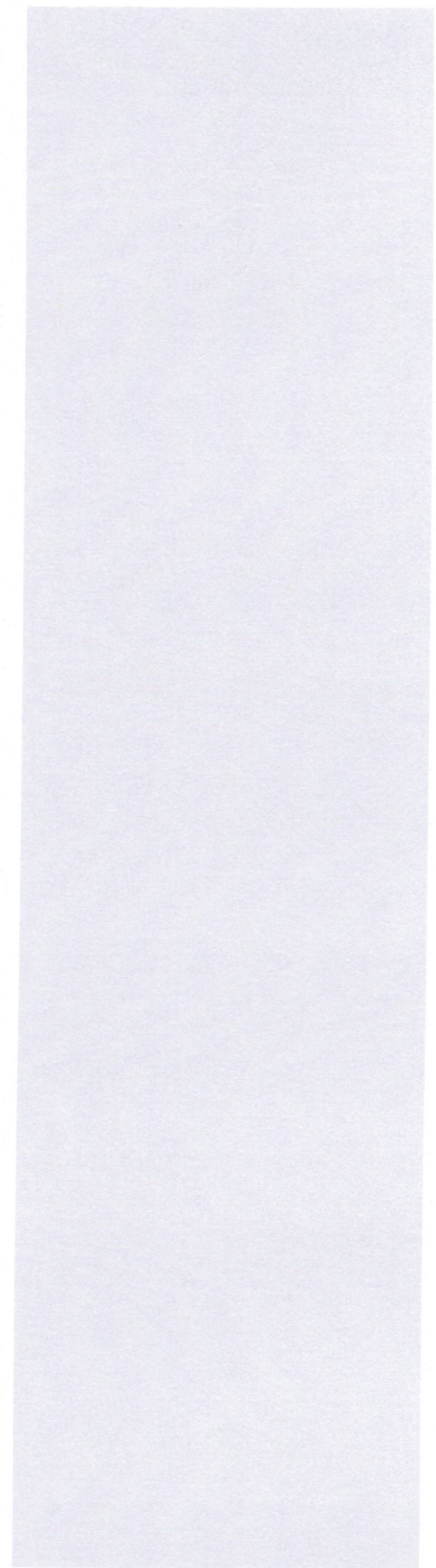
Thesis Defense

In addition to the creative project, the written thesis, and dissemination of work, the final step in completing the thesis requirement is an oral defense before the thesis committee. Candidates present their creative or research work and explain its creation in an oral defense. These presentations are made to the student's committee, in a public meeting that other faculty and students may attend.

INDEPENDENT LEARNING

School of Visual Arts & Design: Emerging Media MFA, Digital Media track change requests
Contact: Phil Peters, Program Coordinator, Philip.Peters@ucf.edu

A thesis is required.





Program Recommendation Form

This form is to be used to revise, add, suspend, or delete degree programs, tracks, or certificate programs. If there are changes to a program and the changes will affect the program tracks also, one form may be used for this type of change.

PLEASE NOTE: The deadline for new tracks or certificates is **February 1 of each year**. Any proposal for new tracks or certificates received after this date will not be included in the next year's catalog. Revisions to existing programs, tracks, or certificates are **due by March 15**. Any proposals for revisions received after that date will not be included in the next year's catalog. Please include catalog copy (description, curriculum, contact information, application requirements, and application deadlines). For revisions – attach the catalog copy showing changes (use Track Changes in Word).

College/Unit(s) Submitting Proposal: Arts & Humanities/School of Visual Arts & Design

Proposed Effective Term/Year: 2012-2013 Catalog

Unit(s) Housing Program: School of Visual Arts & Design

Name of program, track and/or certificate: Digital Media MA, Visual Language & Interactive Media track

Brief description of program (this description will show up in the graduate catalog copy): *Do not add complete catalog copy here.*

In the Visual Language and Interactive Media track of the Digital Media MA program students explore new media in creative and research projects that foster a unique contribution characterized as innovative in approach

DELIVERY - Will program be delivered: ☐ Face to face ☐ Completely online ☒ Mixed delivery

Admissions deadlines: (Please specify if you have a different deadline for the track than for the program?)

No changes

Application requirements: (Please specify if you have different application requirements for the track than for the program? Will you admit directly to the track?)

No changes

Program Director(s) and contact information: (name, email, phone, campus address, program website address)

Philip Peters, philip.peters@ucf.edu, 407-823-0091, 500 W. Livingston, Orlando, FL 32801.

www.svad.ucf.edu

Please check one: this action affects a: ☐ Program ☒ Track ☐ Certificate

Please check one: this action is a(n):

☐ Addition. Please proceed to Part A.

☒ Revision. If a revision applies to multiple tracks, please list them here and then proceed to Part A:

☐ Inactivation

☐ Temporary Suspension of Admissions. Give Length of Suspension:

Temporary suspension of admissions: The program will be removed from the online application. A notation will be entered in the graduate catalog indicating the length of the suspension of admissions. Currently enrolled students will not experience any issues with continued enrollment.

Inactivation: Admissions will be suspended for new students and the program will be removed from the online application. Students active in the program are eligible to complete the program under the appropriate criteria and an appropriate teach-out plan is required. The program will be removed from the catalog as of the approved term.

If you checked inactivation or you are temporarily suspending admissions, please go to Part B and complete it.

Signature Page

RECOMMENDATIONS

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Department Chair: <u>Paul Jant</u>	Date: <u>1-20-12</u>
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	College Curriculum Committee Chair: <u>[Signature]</u>	Date: <u>2/6/12</u>
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	College Dean: <u>[Signature]</u>	Date: <u>2/6/12</u>
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Chair or GSC: _____	Date: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Dean, College of Graduate Studies: _____	Date: _____

APPROVAL

Provost and Vice President for Academic Affairs: _____ Date: _____

Distribution: After approval is received from the Provost, distribution will be to:

Department(s); College; Registrar; Associate Registrar; Institutional Research; Academic Services; Faculty Senate;
University Analysis and Planning Support; College of Graduate Studies

Part A – For additions or revisions of programs, tracks or certificates

Brief statement of rationale: (Please indicate the rationale, how it affects the unit and faculty teaching in and students enrolled in the program, track or certificate.)

We need to remove one course from Thesis Option required courses and one course from the Non-Thesis Option required courses that are no longer offered, but we wanted to make sure we replaced them with another required course so as not to weaken the core of the program.

For Revisions:

Brief listing of Program Changes: (Please indicate the changes in bullet format. If there are changes to the credit hours of the program, required courses or other requirements, please state those changes. **Remember to attach the catalog copy showing changes, using Track Changes in Word.**)

1. Remove DIG 6550 Digital Media Pre Production (3 credit hours) in the Thesis Option required courses section, replace with DIG 6605 Physical Computing (3 credit hours).
2. Remove DIG 6877 Interactive Performance (3 credit hours) in the Non-thesis Option required courses section, replace with DIG 6812 Digital Interaction for Informal Learning (3 credit hours).

Will students be moved from an existing program, track, or certificate into this new program, track, or certificate?

☐ Yes ☒ No

If yes, state the name of the program or track where students are currently enrolled and provide a list of students if possible:

Will students have the option to stay in their existing program, track, or certificate? ☒ Yes ☐ No

Name Change

Are you changing the name of an existing program, track, or certificate? ☐ Yes ☒ No

If yes, provide the new name of the program, track, or certificate:

Provide the name of the current program, track, or certificate:

Digital Media MA, Visual Language & Interactive Media track

When is the name change effective? Please note: A name change will apply to the record of all students who are currently enrolled, readmitted or newly admitted into this program as of the effective date of this change.

Will students have the option to stay in their existing program, track, or certificate? ☒ Yes ☐ No

If you are requesting a CIP Code change for an existing program, track, or certificate, please provide:

old CIP:

new CIP:

If a name change is your only revision, stop here. Otherwise, complete the rest of Part A.

Part A - Continued

Specify the faculty who will participate in the program, track or certificate and their credentials to do so: (List faculty and a brief paragraph of their credentials.)

No faculty changes are required.

Impact of changes on students: Will current students be impacted by the addition or revision of a program, track or certificate? If so, how?

Students will have more elective options.

If applicable, provide a written agreement (email is fine) from all involved units that they are in support of, will provide courses to, or will participate in the program, track, or certificate. Please attach the correspondence and also list the units here.

If an addition, provide a statement of who is likely to enroll and why. Please state if there is licensure or certification that depends upon this education, etc. Also, complete the following table.

	Year 1	Year 2	Year 3
Headcount			
SCHs			

If an addition, indicate likely career or student outcomes upon completion: (What will students do? What will their job titles be?)

Part A - Continued

If an addition or there are substantial REVISIONS to existing tracks or certificates, please complete the following table on financial support: (Specify all forms of support – assistantships, fellowships, and tuition remission.)

	No. assistantship students	Source of funds	No. fellowship students (specify fellowship)	No. tuition remissions	Source of funds
Year 1					
Year 2					
Year 3					

Checklist of items to be provided:

- ☒ Electronic graduate catalog copy for additions; track changes included if there are revisions. (required)
- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ Emails showing consultation with other units. (if applicable)
- ☐ If an addition, list of 1-3 students and 1-3 faculty for profiles in the graduate catalog (provide email address so Graduate Studies can contact them to write profiles and take photos). You may provide draft copy of profiles if you wish.
- ☐ If an addition, what disciplines does this program, track or certificate belong to? What other UCF graduate programs, tracks, or certificates are related to it? This information will be used to provide additional links for prospective students to search in the online graduate catalog.

Part B – For inactivations or suspensions of programs, tracks, or certificates

Are students currently enrolled in the program? ☐ Yes ☐ No

If yes, number of current students:

Please specify the intended time period of inactivation or suspension:

If program, track, or certificate is being inactivated or suspended, then attach a "teach out" plan for all current students specifying how they can finish the program or where students will be placed if moving to another program. The "teach out" plan should specify when courses will be offered to enable students to finish. Specify whether students will remain in the existing program to finish, and if so, when the completion date will be, whether students will be moved to another program, etc. Please provide a list of students where applicable.

Sample teach out plan: Enter the terms and courses that will be taught for each term throughout the last semester. **Please delete course prefixes and numbers in this section if no teach out plan is required.**

Fall 2010	Spring 2011	Summer 2011	Fall 2011	Spring 2012

Checklist of items to be provided:

- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ E-mails showing consultation with other units. (if applicable)

School of Visual Arts & Design: Digital Media MA, Visual Language & Interactive Media track change requests

Contact: Phil Peters, Program Coordinator, Philip.Peters@ucf.edu

TRACK DESCRIPTION

In the Visual Language and Interactive Media track of the Digital Media MA program students explore new media in creative and research projects that foster a unique contribution characterized as innovative in approach.

[Read More](#)

CURRICULUM

Total Credit Hours Required:

36 Credit Hours Minimum beyond the Bachelor's Degree

During the first academic year, students take required courses as dictated by the student's plan of study and electives suggested by their adviser. The MA graduate program coordinator is the adviser for all nonthesis students. The coordinator is also the adviser for all thesis students until a Digital Media MA faculty mentor agrees to work with the student. The faculty mentor then becomes the student's graduate adviser.

In the second year, students who select the thesis option will complete core and required course work as well as thesis research. Thesis students must be accepted by a faculty member for supervision in order to carry out the required thesis study. Thesis option students are encouraged to begin this process immediately upon entering the program by meeting faculty who work in areas of interest complementary to the student's. Nonthesis option students will complete core, required course work and electives as recommended by the MA program coordinator.

Typically, students entering or continuing professional careers following the MA should select the nonthesis option. Those who plan to enter doctoral programs should select the thesis option.

Required Courses—21 Credit Hours

- DIG 6647 Science and Technology of Dynamic Media (3 credit hours)
- DIG 5137 Information Architecture (3 credit hours)
- DIG 5487 Principles of Visual Language (3 credit hours)
- DIG 6432 Transmedia Story Creation (3 credit hours)
- DIG 6136 Design for Media (3 credit hours)
- DIG 6546 Previsualization and Concept Development (3 credit hours)
- DIG 6551 Applied Interactive Story (3 credit hours)

Thesis Option—15 Credit Hours

- DIG 6825 Digital Media Research Methods (3 credit hours)
- DIG 6918 Directed Research (3 credit hours)

School of Visual Arts & Design: Digital Media MA, Visual Language & Interactive Media track change requests

Contact: Phil Peters, Program Coordinator, Philip.Peters@ucf.edu

- ~~DIG 6550 Digital Media Pre-Production (3 credit hours)~~ [DIG 6605 Physical Computing \(3 credit hours\)](#)
- DIG 6971 (6 credit hours)

Comment [KR1]: Replace with DIG 6605 Physical Computing (3 credit hours)

Each candidate for the Master of Arts submits a thesis prospectus and preliminary bibliography on a topic selected in consultation with the adviser. The formal thesis is initiated by the preparation of a proposal that meets both departmental and university requirements for the thesis. Prior to enrollment into thesis credit hours, the adviser, in consultation with the student, designates a Thesis Committee to be further approved by the College Graduate Dean. This committee is chaired by the adviser and includes two or more additional faculty members from the School of Visual Arts and Design.

The members of the student's thesis committee judge the proposal as the preliminary step to beginning the thesis. This committee must approve the Thesis Proposal before academic credit can accrue.

The thesis is a formal written document. The introduction cites similar, related, and antecedent work. The body explains the purposes of the project, the method of its production, and any evaluation that was performed. The conclusion includes plans for future work. The thesis also includes an archival copy of the resulting creative product. Both the thesis and the creative product must be delivered in digital form, acceptable by the UCF library according to its standards for digital dissertations and theses.

Thesis Defense

In addition to a written thesis, the final step in completing the thesis requirement is an oral defense before the thesis committee. Candidates must present their creative or research work and explain its creation in an oral defense. These presentations are made to the student's committee in a public meeting that other faculty and students may attend.

Nonthesis Option—15 Credit Hours

Students selecting the nonthesis option are required to complete 6 additional credit hours of required courses and 9 credit hours of electives:

- ~~DIG 6877 Theory and Application of Interactive Performance (3 credit hours)~~ [DIG 6812 Digital Interaction for Informal Learning \(3 credit hours\)](#)
- DIG 5565C Digital Asset Management (3 credit hours)
- Electives (9 credit hours)

Comment [KR2]: Remove and replace with DIG 6XXX Digital Interaction for Informal Learning

Many graduate-level courses in the College of Arts and Humanities can be used as electives, based on an adviser-approved plan of study. In addition, other graduate courses may be used in place of those listed above, with permission of the adviser. These courses must be selected so as to ensure that at least one-half of the courses in the student's plan of study are taken at the 6000 level.

School of Visual Arts & Design: Digital Media MA, Visual Language & Interactive Media track change requests

Contact: Phil Peters, Program Coordinator, Philip.Peters@ucf.edu

Comprehensive Examinations

Digital Media MA students must take a Comprehensive Examination. The process is designed to evaluate both the students' basic knowledge and competencies, and their ability to synthesize and apply what they know in depth—that is, both the breadth and depth of student learning in the Program. It is not intended to test specific course content for which students have already been evaluated and graded. The exam is designed to test the student's ability to respond and substantiate the response in a professional and educated fashion.

The Comprehensive Examination consists of five general categories. Students answer four questions in a total maximum time of four hours. Students will be given the opportunity to select one question from any four of the five categories, i.e. 1. Technology and Theory: development, effects, uses; 2. Media history: New media, cinema, television;

INDEPENDENT LEARNING

Students who elect the thesis option engage in independent learning through the design and implementation of original research in the thesis process. Students who pursue the comprehensive exam option experience independent learning through their individual preparation for comprehensive exams. All students engage in independent learning in every Digital Media core course. A research paper or project is required in each of these classes. The papers and projects provide independent learning by requiring students to design and carry out research projects and develop analytical papers, some of which are submitted to conferences and/or journals for peer review. Internships and independent studies are also common opportunities for independent learning in the Digital Media MA Program.

Summary of Courses Not Offered for 5 Years

Graduate Council Curriculum Committee

February 20, 2012

1. CAH – received completed list
2. CBA – received partial list. Waiting for remainder.
3. COHPA – received no list. They are working on list.
4. COM – received complete list
5. CON – received completed list
6. COS – received completed list
7. CED – received completed list
8. CECS – received completed list
9. RCHM –received completed list
10. COP – received completed list

Graduate Council Curriculum Committee **Course Agenda for 02-20-2012**

College of Arts & Humanities Special Topics

HIS 6938 Sect 01 CAH-History 3(3,0)

ST: Seminar in Historic Preservation: PR: Graduate Standing or C.I. Seminar in the theory and work of historic preservation. Research methods, theory, law, and professional standards will be explored through student generated preservation projects. *Occasional*.

29 of 30 character abbreviation: **ST: Sem Historic Preservation**

Rationale: This course is being offered to diversify our course offerings and add to the Department's courses in graduate level Public History.

Discussion with others: No conflicts foreseen.

AGENDA NOTES: Course Addition also being proposed.

College of Arts & Humanities Course Action Additions

HIS 6XXX CAH-History 3(3,0)

Seminar in Historic Preservation: PR: Graduate Standing or C.I. Seminar in the theory and work of historic preservation. Research methods, theory, law, and professional standards will be explored through student generated preservation projects. *Occasional*.

28 of 30 character abbreviation: **Sem in Historic Preservation**

Rationale: This course is being offered to diversify our course offerings and add to the Department's courses in graduate level Public History.

Discussion with others: No Conflict foreseen.

Effect on majors: History MA Students

AGENDA NOTES: Special Topic also being proposed.

College of Medicine Course Action Additions

MEL 6XXX COM-Medicine Var(1-4,0)

Geriatrics: Fundamentals of Health Care Policy & System: PR: Required to be in good academic standing. A pre-clinical elective designed to give students the opportunity to discuss health policy/service issues and to practice basic clinical interviewing skills with older adults. *Fall, Spring*.

30 of 30 character abbreviation: **Geriatrics: Fund Hlth Care Pol**

College of Sciences Course Action Deletions

INP 6094 COS-Psychology 3(3,0)

Current Topics in Industrial and Organizational Psychology: PR: Admission into the Industrial and Organizational Psychology MS program or C.I. A review of the theoretical and

empirical literature relevant to selected topics in Industrial and Organizational Psychology.
Occasional.

Rationale: INP6094 will no longer be offered in the future. The "Seminar" course (6xxx) that students will take with the PhD students will accomplish the same goal as the Current Topics course covered, so we no longer need it.

Discussion with others: No other program uses the course.

Effect on majors: -----2/1/2012: This course is not used as a prerequisite.

INP 6947 COS-Psychology 3(3,0)

Industrial Psychology Practicum II: PR: Graduate admission and C.I. Supervised research in industry. May be repeated for credit. *Occasional.*

Rationale: INP6947 hasn't been offered in 5 years and we do not plan to offer it again. Students sign up for only one semester of practicum.

Discussion with others: This course is not listed in any other graduate program description in the catalog.

Effect on majors: -----2/1/2012: This course is not used as a prerequisite.

Engineering & Computer Science Course Action Deletions

Tabled. Waiting for clarification on program changes.

EML 5605 ECS-Mechanical/Matrls/Aerosp 3(3,0)

Applied HVAC Engineering: PR: EML 5606; CR: EML 4142. Applications of HVAC systems design with the objective of optimizing energy efficiency, humidity control, ventilation and indoor air quality. *Spring.*

Rationale: Split level no longer requested by MMAE department.

Effect on majors: -----1/18/2012: This course is not used as a prerequisite.

Tabled. Waiting for clarification on program changes.

EML 5606 ECS-Mechanical/Matrls/Aerosp 3(3,0)

HVAC Systems Engineering: PR: EGN 3343; CR: (EML 3701 or EAS 3101), and EML 3101. Heating, ventilation, air conditioning and refrigeration principles, system design and analysis. *Fall.*

Rationale: Split level option no longer requested by MMAE.

Effect on majors: -----1/18/2012: This course is a prerequisite for the following course, which will need a course action revision form; EML 5605

College of Arts & Humanities Course Action Revisions

AMH 6591 Seminar in Documentary Editing-- 3(3,0)

HIS 6591 Seminar in Documentary Editing and New Media

PR: Graduate ~~standing.~~ standing or C.I.

~~This course provides an introduction to the theory and practical skills involved in documentary editing.~~

The theory and practical skills involved in documentary editing and new media.

25 of 30 character abbreviation: **Documentary and New Media**

Rationale: This course is being offered to diversify our course offerings and add to the Department's courses in graduate level public history.

Discussion with others: SVAD: discussed, no conflicts. Film: discussed, no conflicts.

Effect on majors: History MA students.

College of Sciences Course Action Revisions

BCH 6740 Advanced Biochemistry 3(3,0)

~~PR: BCH 4053 and BCH 4054 or C.I.~~ PR: Must meet proficiency requirement as determined by the Chemistry department (refer to Chemistry program handbook or contact department for more information) or C.I.

Biochemistry focusing on enzymology, regulation of the activity of enzymes and cellular chemical activity, and biochemical methods to study proteins.

Rationale: Changing prerequisite to assist with enrollment controls.

Discussion with others: Teacher Leadership MEd - Science Education Track lists this course as an elective option in their program description. Program contact Janet Andreasen has been notified of proposed prerequisite changes by e-mail 10/7/11. See attached documentation which shows COE acknowledgement of changes and lack of possible conflict.

Effect on majors: Chemistry MS, PhD, Forensic Science MS - Biochemistry Track

CHM 6710 Applied Analytical Chemistry 3(3,0)

~~PR: CHM 2211, CHM 4130C, and CHM 3411 or equivalent.~~ PR: Must meet proficiency requirement as determined by the Chemistry department (refer to Chemistry program handbook or contact department for more information) or C.I.

Concepts in molecular structure that integrate structural, physical, and chemical properties with aspects of industrial and analytical chemistry.

Rationale: Changing prerequisite to assist with enrollment controls.

Discussion with others: No other departments list this course in their graduate catalog program descriptions.

Effect on majors: Chemistry MS, PhD

Engineering & Computer Science Course Action Revisions

Tabled. Bring back as a new course instead of revision.

~~**CDA 5532 Network-Centric Computing 3(3,0)**~~

COP 6XXX Cloud Computing

~~PR: Graduate standing.~~ PR: CDA 5106 or CDA 5215 or C.I.

~~Concepts in network-centric computing and process coordination in information grids.~~

This class introduces cloud computing, infrastructure, applications, architecture, resources management, security, cloud storage systems and networks for computer clouds.

30 character abbreviation: **Cloud Computing**

Health & Public Affairs Course Action Revisions

PAD 6701 ~~Analytic Techniques for Public Administration II~~ 3(3,0)

Analytical Techniques for Public Administration

PR: Completion of PAD-6700. PR: PAD 6700 or C.I.

Applied analytical tools for administrators in the public sector. Practical use of computers in policy and decision making.

28 of 30 character abbreviation: **Analytical Techniques for PA**

Rationale: The change of the name will help students identify the distinction between the two courses. PAD 6700 Research Methods in Public Admin (currently Analytic techniques for Public Administration I) focuses on research methods and application to public policy and administration. PAD 6701 Analytical Techniques for Public Administration (Currently Analytic Techniques for Public Administration II) focuses on quantitative and statistical methods in public policy and administration. Students are trying to keep both courses toward the end of their MPA degree. We made the method course a prerequisite to additional three courses to make sure they take it as early in the program as possible. This name change and adding the method course as prerequisite will help them design their coursework accordingly and benefit from the method course earlier in the degree program. Research methods course will cover graduate level writing and academic integrity modules as well. We hope that this change will help our student in their major assignments for other courses in the program. The proposed change will impact students positively.

Effect on majors: MPA