

**TO:** The Engineering Faculty  
**FROM:** The Faculty of the School of Materials Engineering  
**DATE:** March 3, 2017  
**RE:** (1) Expanded offering of MSE 200000 level courses  
(2) Inclusion of all courses in the University Core Curriculum in MSE

**(1) Expanded offering of MSE 200000 level courses:**

The School of Materials Engineering will now offer the following courses both fall and spring semester: MSE 23500, MSE 25000, MSE 26000, and MSE 270.

The increased frequency of offerings is due to increasing enrollments and provides better opportunities for our students to tailor their schedules for Co-Op, internships, and study abroad experiences.

**(2) Inclusion of all courses in the University Core Curriculum in MSE:**

Courses taken by students in First Year Engineering that satisfy the Foundational Learning Outcomes of the University Core Curriculum but are not directly listed in the MSE Plan of Study will count as either an MSE Support Area Elective or as an MSE General Education Elective.

Specifically, COM 11400 is a required course in the MSE program. Should another course be taken in to satisfy the Oral Communication requirement in the University Core Curriculum, that course will also satisfy an MSE General Education Elective.

Additionally, CHM 11600 is a required course in the MSE program. Should another course be taken to satisfy the Science requirement in University Core Curriculum, that course will also satisfy an MSE Support Area Elective.



---

David F. Bahr, Professor and Head  
School of Materials Engineering

# MSE - 23500 - Materials Properties Laboratory

2017-2018 Course Revisions Undergraduate

## General Course Information

### **\*\*Read Before You Begin to Import the Course to Change\*\***

Click on the Import Icon 

Select "Filter by Field"

Choose "Prefix"

Use an asterisk (\*) for a wildcard search, i.e. COM\*

Select the course you would like to import

**Once you import, DO NOT make changes to the existing information yet.**

**Go to the top of the proposal to click the area to validate and launch.**

**Originating Campus\***

- West Lafayette
- Northwest
- Fort Wayne
- IUPUI

**Campus**

Purdue West Lafayette

**Non-Originating Campus(es): (Select the correct combination of additional campuses offering this course)\***

- None
- West Lafayette
- Northwest
- Fort Wayne
- IUPUI
- Northwest & Fort Wayne
- Northwest & IUPUI
- West Lafayette & Northwest
- West Lafayette & Fort Wayne
- West Lafayette & IUPUI
- Fort Wayne & IUPUI
- Northwest, Fort Wayne, & IUPUI

- West Lafayette, Fort Wayne, & IUPUI
- West Lafayette, Northwest, & IUPUI
- West Lafayette, Fort Wayne, & Northwest

**College/ School**

College of Engineering - WL

**Department\***

-School of Materials Engineering - WL

**Crosslisted  
Course/  
Equivalent  
Course**

**Changes  
requested**

- Course Attributes
- Course Description
- Course Fees
- Course Number
- Course Title
- Credit Hours
- Crosslisted Course/Equivalent Course
- Full Time Privilege
- Grade Mode
- Learning Outcomes
- Offer Existing Course at Another Campus
- Pass/Not Pass only
- Prerequisite
- Repeatable
- Restrictions
- Satisfactory/Unsatisfactory Only
- Schedule Type
- Terms offered
- Transfer from One Department to Another

**Proposed  
Effective Term**

Fall 2017

**Make changes in the fields below**

**Course Numbers:** All course numbers may only be used once for a course in order to allow our repeat course audit to work properly. Before submitting a form for a new course or renumber, please make sure the course number is available. Please remember Purdue now uses 5-digit course numbers to allow more options for the departments. This may be verified through the following:

Legacy Course Catalog: <https://www.purdue.edu/registrar/legacy/catalog.cfm>

Banner Course Catalog: <https://selfservice.mypurdue.purdue.edu>

<b>Subject Code*</b>	MSE	<b>Course Number*</b>	23500
<b>Long Title*</b>	Materials Properties Laboratory		
<b>Short Title (max 30 characters)</b>	Mat Properties Lab		

**Multiple Campuses: There is only one version of a course in the catalog!** Forms requesting title, credit, schedule type, description, renumber or attribute modifications for courses offered at multiple campuses, **must** be agreed upon by all involved, otherwise the request will be denied and no change will be made. If agreed, the modification will be made and will affect all campuses, not just the campus requesting the change. Standard turnaround time for all approvals/denials is 30 days.

<b>Terms Offered (Check all that apply)</b>	<input checked="" type="checkbox"/> Fall <input checked="" type="checkbox"/> Spring <input checked="" type="checkbox"/> Summer
---	--

### Credit Hours

<b>Credit Hours</b>	3.00
<b>Course Repeat Status</b>	<input type="checkbox"/> Course may be repeated <input checked="" type="checkbox"/> Course may not be repeated
<b>If repeatable, is this:</b>	<input type="checkbox"/> Unlimited <input checked="" type="checkbox"/> Maximum Repeatable Credit
<b>Maximum Credit Amount</b>	
<b>Grade Mode (Select all that apply)</b>	<input checked="" type="checkbox"/> Regular Grade <input checked="" type="checkbox"/> Pass/No Pass Option <input checked="" type="checkbox"/> Audit <input type="checkbox"/> Satisfactory/Unsatisfactory

**Course Fees:** The following fees are provided on the form: Coop, Lab, and Rate Request. In order to ensure the accurate fee is assessed on a course, the Bursar's Office would like to have an explanation included with the form along with the business manager's contact information if additional information is needed.

--

<b>Additional Fees</b>	<input type="radio"/> Yes
	<input checked="" type="radio"/> No

<b>Attributes (Select all that apply)</b>	<input type="checkbox"/> Variable Title
	<input type="checkbox"/> Honors
	<input type="checkbox"/> Full-Time Privileges
	<input type="checkbox"/> Half-Time Privileges
	<input type="checkbox"/> Internship
	<input type="checkbox"/> Coop
	<input type="checkbox"/> Parallel Coop
	<input type="checkbox"/> Credit By Exam

**Schedule Type/Credit Hour:** The following links will provide explanations of the schedule types and credit hours to assist in assigning accurate types to a course.

[Schedule Type Classifications](#)

[Credit Hour Guidelines](#)

**Use the following instructions to add schedule type or show changes for the course in the text box. Examples are listed below.**

- Schedule Type
- Minutes per Meeting
- Number of Meeting per week
- Weeks per term

Examples: (3 credit course) LEC/50min per mtg/3 mtgs per wk/16 wks per term OR (3 credit course with Lecture and Lab) LEC/50/2/16 and LAB/100/1/16

<b>Proposed Schedule Type Changes</b>	
---	--

**Restrictions/Prerequisites:** If restrictions are being requested, please provide the proper Banner codes (major, program etc.) to ensure all are accurately reflected on the course. All codes may be found on our website under [Advisors/Active PWL Major Programs](#), and [Active PWL Minors](#) links:

**Restriction Types: major, program or school codes; never use more than one**  
**Use the words "and" or "or" when filling out form instead of commas**  
**Co-requisite courses are always required to be taken at the same time**  
**Concurrent prerequisite courses may be taken during the same semester or in a previous term**  
**600-level prerequisites are not enforced, they are added to description as informational text**

**If there is an equivalent course the department would like listed with the prerequisites, that specific course will need to be specified on the form in order to have it enforced through the system.**

**Explain changes to restrictions:**

**Explain changes to requisite information:**

**Course Description**

Credit Hours: 3.00. Laboratory experiments involving usage of standard equipment in the measurement of mechanical, microstructural, thermal, electrical, and optical properties. Introduction to computer aided data analysis. Experiments are carried out with metal, ceramic, and polymeric materials to illustrate property-structure-processing relationships. Typically offered Fall.

**Learning Outcomes**

(Please only provide learning outcomes if changes are being made or if they were not previously provided.)

Additional Course Information (if needed)

**Syllabus** - Attach using the directions below:

Navigate to the Proposal Toolbox at the top of the right side.

Select the "Add Files" button 

Upload file to be attached.

## Impact Report

**To see how this course impacts other departments, please run the Impact Report.**

An Impact Report may be run to determine what academic programs the course being revised are housed within. This will help determine the impact of your requested revision. Based on the results, we encourage you to contact any affected departments.

**Impact Report Instructions:**

Save changes 

Navigate to the top of the proposal to run the Impact Report.

This will assist you in answering the questions.

Is this course required on a  Yes

Plan of Study?  No

Is this course a prerequisite?  Yes

No

Is this course an equivalent for a course on a Plan of Study?  Yes

No

If this course is included on a Plan of Study, the proposed effective session is subject to change.

If Yes to any of the above, please contact affected departments.

Justification for Revision

Click on the arrow  at the top of the page to launch the proposal. *(Only launch the proposal after you completely finished.)*

### WL Catalog Use Only

Catalog Ownership

Course Type



# MSE - 25000 - Physical Properties In Engineering Systems

2017-2018 Course Revisions Undergraduate

## General Course Information

### **\*\*Read Before You Begin to Import the Course to Change\*\***

Click on the Import Icon 

Select "Filter by Field"

Choose "Prefix"

Use an asterisk (\*) for a wildcard search, i.e. COM\*

Select the course you would like to import

**Once you import, DO NOT make changes to the existing information yet.**

**Go to the top of the proposal to click the area to validate and launch.**

**Originating Campus\***

- West Lafayette
- Northwest
- Fort Wayne
- IUPUI

**Campus**

Purdue West Lafayette

**Non-Originating Campus(es): (Select the correct combination of additional campuses offering this course)\***

- None
- West Lafayette
- Northwest
- Fort Wayne
- IUPUI
- Northwest & Fort Wayne
- Northwest & IUPUI
- West Lafayette & Northwest
- West Lafayette & Fort Wayne
- West Lafayette & IUPUI
- Fort Wayne & IUPUI
- Northwest, Fort Wayne, & IUPUI

- West Lafayette, Fort Wayne, & IUPUI
- West Lafayette, Northwest, & IUPUI
- West Lafayette, Fort Wayne, & Northwest

**College/ School**

College of Engineering - WL

**Department\***

-School of Materials Engineering - WL

**Crosslisted  
Course/  
Equivalent  
Course**

**Changes  
requested**

- Course Attributes
- Course Description
- Course Fees
- Course Number
- Course Title
- Credit Hours
- Crosslisted Course/Equivalent Course
- Full Time Privilege
- Grade Mode
- Learning Outcomes
- Offer Existing Course at Another Campus
- Pass/Not Pass only
- Prerequisite
- Repeatable
- Restrictions
- Satisfactory/Unsatisfactory Only
- Schedule Type
- Terms offered
- Transfer from One Department to Another

**Proposed  
Effective Term**

Fall 2017

**Make changes in the fields below**

**Course Numbers:** All course numbers may only be used once for a course in order to allow our repeat course audit to work properly. Before submitting a form for a new course or renumber, please make sure the course number is available. Please remember Purdue now uses 5-digit course numbers to allow more options for the departments. This may be verified through the following:

Legacy Course Catalog: <https://www.purdue.edu/registrar/legacy/catalog.cfm>

Banner Course Catalog: <https://selfservice.mypurdue.purdue.edu>

<b>Subject Code*</b>	MSE	<b>Course Number*</b>	25000
<b>Long Title*</b>	Physical Properties In Engineering Systems		
<b>Short Title (max 30 characters)</b>	Physical Prop In Engr Systems		

**Multiple Campuses: There is only one version of a course in the catalog!** Forms requesting title, credit, schedule type, description, renumber or attribute modifications for courses offered at multiple campuses, **must** be agreed upon by all involved, otherwise the request will be denied and no change will be made. If agreed, the modification will be made and will affect all campuses, not just the campus requesting the change. Standard turnaround time for all approvals/denials is 30 days.

<b>Terms Offered (Check all that apply)</b>	<input checked="" type="checkbox"/> Fall <input checked="" type="checkbox"/> Spring <input type="checkbox"/> Summer
---	---

### Credit Hours

<b>Credit Hours</b>	3.00
<b>Course Repeat Status</b>	<input type="checkbox"/> Course may be repeated <input checked="" type="checkbox"/> Course may not be repeated
<b>If repeatable, is this:</b>	<input type="checkbox"/> Unlimited <input checked="" type="checkbox"/> Maximum Repeatable Credit
<b>Maximum Credit Amount</b>	
<b>Grade Mode (Select all that apply)</b>	<input checked="" type="checkbox"/> Regular Grade <input checked="" type="checkbox"/> Pass/No Pass Option <input checked="" type="checkbox"/> Audit <input type="checkbox"/> Satisfactory/Unsatisfactory

**Course Fees:** The following fees are provided on the form: Coop, Lab, and Rate Request. In order to ensure the accurate fee is assessed on a course, the Bursar's Office would like to have an explanation included with the form along with the business manager's contact information if additional information is needed.

--

<b>Additional Fees</b>	<input type="radio"/> Yes
	<input checked="" type="radio"/> No

<b>Attributes (Select all that apply)</b>	<input type="checkbox"/> Variable Title
	<input type="checkbox"/> Honors
	<input type="checkbox"/> Full-Time Privileges
	<input type="checkbox"/> Half-Time Privileges
	<input type="checkbox"/> Internship
	<input type="checkbox"/> Coop
	<input type="checkbox"/> Parallel Coop
	<input type="checkbox"/> Credit By Exam

**Schedule Type/Credit Hour:** The following links will provide explanations of the schedule types and credit hours to assist in assigning accurate types to a course.

[Schedule Type Classifications](#)

[Credit Hour Guidelines](#)

**Use the following instructions to add schedule type or show changes for the course in the text box. Examples are listed below.**

- Schedule Type
- Minutes per Meeting
- Number of Meeting per week
- Weeks per term

Examples: (3 credit course) LEC/50min per mtg/3 mtgs per wk/16 wks per term OR (3 credit course with Lecture and Lab) LEC/50/2/16 and LAB/100/1/16

<b>Proposed Schedule Type Changes</b>	
---	--

**Restrictions/Prerequisites:** If restrictions are being requested, please provide the proper Banner codes (major, program etc.) to ensure all are accurately reflected on the course. All codes may be found on our website under [Advisors/Active PWL Major Programs](#), and [Active PWL Minors](#) links:

**Restriction Types: major, program or school codes; never use more than one**  
**Use the words "and" or "or" when filling out form instead of commas**  
**Co-requisite courses are always required to be taken at the same time**  
**Concurrent prerequisite courses may be taken during the same semester or in a previous term**  
**600-level prerequisites are not enforced, they are added to description as informational text**

**If there is an equivalent course the department would like listed with the prerequisites, that specific course will need to be specified on the form in order to have it enforced through the system.**

**Explain changes to restrictions:**

**Explain changes to requisite information:**

**Course Description**

Credit Hours: 3.00. Class connects math, science and engineering practice and applications. Presents foundational aspects of engineering problem solving, use of computer math tools for engineering problem solving, basic engineering statics, dynamics and mechanics, group problem solving approaches, and introductory aspects of design and materials selection. Typically offered Spring.

**Learning Outcomes**

(Please only provide learning outcomes if changes are being made or if they were not previously provided.)

Additional Course Information (if needed)

**Syllabus** - Attach using the directions below:

Navigate to the Proposal Toolbox at the top of the right side.

Select the "Add Files" button 

Upload file to be attached.

## Impact Report

**To see how this course impacts other departments, please run the Impact Report.**

An Impact Report may be run to determine what academic programs the course being revised are housed within. This will help determine the impact of your requested revision. Based on the results, we encourage you to contact any affected departments.

**Impact Report Instructions:**

Save changes 

Navigate to the top of the proposal to run the Impact Report.

This will assist you in answering the questions.

Is this course required on a  Yes

**Plan of Study?**  No

**Is this course a prerequisite?**  Yes

No

**Is this course an equivalent for a course on a Plan of Study?**  Yes

No

If this course is included on a Plan of Study, the proposed effective session is subject to change.

If Yes to any of the above, please contact affected departments.

**Justification for Revision**

Click on the arrow  at the top of the page to launch the proposal. *(Only launch the proposal after you completely finished.)*

### WL Catalog Use Only

**Catalog Ownership**

**Course Type**

# MSE - 26000 - Thermodynamics Of Materials

2017-2018 Course Revisions Undergraduate

## General Course Information

### **\*\*Read Before You Begin to Import the Course to Change\*\***

Click on the Import Icon 

Select "Filter by Field"

Choose "Prefix"

Use an asterisk (\*) for a wildcard search, i.e. COM\*

Select the course you would like to import

**Once you import, DO NOT make changes to the existing information yet.**

**Go to the top of the proposal to click the area to validate and launch.**

**Originating Campus\***

- West Lafayette
- Northwest
- Fort Wayne
- IUPUI

**Campus**

Purdue West Lafayette

**Non-Originating Campus(es): (Select the correct combination of additional campuses offering this course)\***

- None
- West Lafayette
- Northwest
- Fort Wayne
- IUPUI
- Northwest & Fort Wayne
- Northwest & IUPUI
- West Lafayette & Northwest
- West Lafayette & Fort Wayne
- West Lafayette & IUPUI
- Fort Wayne & IUPUI
- Northwest, Fort Wayne, & IUPUI



- West Lafayette, Fort Wayne, & IUPUI
- West Lafayette, Northwest, & IUPUI
- West Lafayette, Fort Wayne, & Northwest

**College/ School**

College of Engineering - WL

**Department\***

-School of Materials Engineering - WL

**Crosslisted  
Course/  
Equivalent  
Course**

**Changes  
requested**

- Course Attributes
- Course Description
- Course Fees
- Course Number
- Course Title
- Credit Hours
- Crosslisted Course/Equivalent Course
- Full Time Privilege
- Grade Mode
- Learning Outcomes
- Offer Existing Course at Another Campus
- Pass/Not Pass only
- Prerequisite
- Repeatable
- Restrictions
- Satisfactory/Unsatisfactory Only
- Schedule Type
- Terms offered
- Transfer from One Department to Another

**Proposed  
Effective Term**

Fall 2017

**Make changes in the fields below**

**Course Numbers:** All course numbers may only be used once for a course in order to allow our repeat course audit to work properly. Before submitting a form for a new course or renumber, please make sure the course number is available. Please remember Purdue now uses 5-digit course numbers to allow more options for the departments. This may be verified through the following:

Legacy Course Catalog: <https://www.purdue.edu/registrar/legacy/catalog.cfm>

Banner Course Catalog: <https://selfservice.mypurdue.purdue.edu>

<b>Subject Code*</b>	MSE	<b>Course Number*</b>	26000
<b>Long Title*</b>	Thermodynamics Of Materials		
<b>Short Title (max 30 characters)</b>	Thermodynamics Of Materials		

**Multiple Campuses: There is only one version of a course in the catalog!** Forms requesting title, credit, schedule type, description, renumber or attribute modifications for courses offered at multiple campuses, **must** be agreed upon by all involved, otherwise the request will be denied and no change will be made. If agreed, the modification will be made and will affect all campuses, not just the campus requesting the change. Standard turnaround time for all approvals/denials is 30 days.

<b>Terms Offered (Check all that apply)</b>	<input checked="" type="checkbox"/> Fall <input checked="" type="checkbox"/> Spring <input type="checkbox"/> Summer
---	---

### Credit Hours

<b>Credit Hours</b>	3.00
<b>Course Repeat Status</b>	<input type="checkbox"/> Course may be repeated <input checked="" type="checkbox"/> Course may not be repeated
<b>If repeatable, is this:</b>	<input type="checkbox"/> Unlimited <input checked="" type="checkbox"/> Maximum Repeatable Credit
<b>Maximum Credit Amount</b>	
<b>Grade Mode (Select all that apply)</b>	<input checked="" type="checkbox"/> Regular Grade <input checked="" type="checkbox"/> Pass/No Pass Option <input checked="" type="checkbox"/> Audit <input type="checkbox"/> Satisfactory/Unsatisfactory

**Course Fees:** The following fees are provided on the form: Coop, Lab, and Rate Request. In order to ensure the accurate fee is assessed on a course, the Bursar's Office would like to have an explanation included with the form along with the business manager's contact information if additional information is needed.

--

<b>Additional Fees</b>	<input type="radio"/> Yes
	<input checked="" type="radio"/> No

<b>Attributes (Select all that apply)</b>	<input type="checkbox"/> Variable Title
	<input type="checkbox"/> Honors
	<input type="checkbox"/> Full-Time Privileges
	<input type="checkbox"/> Half-Time Privileges
	<input type="checkbox"/> Internship
	<input type="checkbox"/> Coop
	<input type="checkbox"/> Parallel Coop
	<input type="checkbox"/> Credit By Exam

**Schedule Type/Credit Hour:** The following links will provide explanations of the schedule types and credit hours to assist in assigning accurate types to a course.

[Schedule Type Classifications](#)

[Credit Hour Guidelines](#)

**Use the following instructions to add schedule type or show changes for the course in the text box. Examples are listed below.**

- Schedule Type
- Minutes per Meeting
- Number of Meeting per week
- Weeks per term

Examples: (3 credit course) LEC/50min per mtg/3 mtgs per wk/16 wks per term OR (3 credit course with Lecture and Lab) LEC/50/2/16 and LAB/100/1/16

<b>Proposed Schedule Type Changes</b>	
---	--

**Restrictions/Prerequisites:** If restrictions are being requested, please provide the proper Banner codes (major, program etc.) to ensure all are accurately reflected on the course. All codes may be found on our website under [Advisors/Active PWL Major Programs](#), and [Active PWL Minors](#) links:

**Restriction Types:** major, program or school codes; never use more than one  
**Use the words "and" or "or" when filling out form instead of commas**  
**Co-requisite courses are always required to be taken at the same time**  
**Concurrent prerequisite courses may be taken during the same semester or in a previous term**  
**600-level prerequisites are not enforced, they are added to description as informational text**

**If there is an equivalent course the department would like listed with the prerequisites, that specific course will need to be specified on the form in order to have it enforced through the system.**

**Explain changes to restrictions:**

**Explain changes to requisite information:**

**Course Description**

Credit Hours: 3.00. Fundamental laws of thermodynamics and their applications to material systems; criteria for equilibrium; reaction and phase equilibria; properties of solutions; thermodynamic origins of phase diagrams. Typically offered Spring.

**Learning Outcomes**

(Please only provide learning outcomes if changes are being made or if they were not previously provided.)

Additional Course Information (if needed)

**Syllabus** - Attach using the directions below:

Navigate to the Proposal Toolbox at the top of the right side.

Select the "Add Files" button 

Upload file to be attached.

## Impact Report

**To see how this course impacts other departments, please run the Impact Report.**

An Impact Report may be run to determine what academic programs the course being revised are housed within. This will help determine the impact of your requested revision. Based on the results, we encourage you to contact any affected departments.

**Impact Report Instructions:**

Save changes 

Navigate to the top of the proposal to run the Impact Report.

This will assist you in answering the questions.

Is this course required on a  Yes

Plan of Study?  No

Is this course a prerequisite?  Yes

No

Is this course an equivalent for a course on a Plan of Study?  Yes

No

If this course is included on a Plan of Study, the proposed effective session is subject to change.

If Yes to any of the above, please contact affected departments.

Justification for Revision

Click on the arrow  at the top of the page to launch the proposal. *(Only launch the proposal after you completely finished.)*

### WL Catalog Use Only

Catalog Ownership

Course Type

# MSE - 27000 - Atomistic Materials Science

2017-2018 Course Revisions Undergraduate

## General Course Information

### **\*\*Read Before You Begin to Import the Course to Change\*\***

Click on the Import Icon 

Select "Filter by Field"

Choose "Prefix"

Use an asterisk (\*) for a wildcard search, i.e. COM\*

Select the course you would like to import

**Once you import, DO NOT make changes to the existing information yet.**

**Go to the top of the proposal to click the area to validate and launch.**

**Originating Campus\***

- West Lafayette
- Northwest
- Fort Wayne
- IUPUI

**Campus**

Purdue West Lafayette

**Non-Originating Campus(es): (Select the correct combination of additional campuses offering this course)\***

- None
- West Lafayette
- Northwest
- Fort Wayne
- IUPUI
- Northwest & Fort Wayne
- Northwest & IUPUI
- West Lafayette & Northwest
- West Lafayette & Fort Wayne
- West Lafayette & IUPUI
- Fort Wayne & IUPUI
- Northwest, Fort Wayne, & IUPUI

- West Lafayette, Fort Wayne, & IUPUI
- West Lafayette, Northwest, & IUPUI
- West Lafayette, Fort Wayne, & Northwest

**College/ School**

College of Engineering - WL

**Department\***

-School of Materials Engineering - WL

**Crosslisted  
Course/  
Equivalent  
Course**

**Changes  
requested**

- Course Attributes
- Course Description
- Course Fees
- Course Number
- Course Title
- Credit Hours
- Crosslisted Course/Equivalent Course
- Full Time Privilege
- Grade Mode
- Learning Outcomes
- Offer Existing Course at Another Campus
- Pass/Not Pass only
- Prerequisite
- Repeatable
- Restrictions
- Satisfactory/Unsatisfactory Only
- Schedule Type
- Terms offered
- Transfer from One Department to Another

**Proposed  
Effective Term**

Fall 2017

**Make changes in the fields below**

**Course Numbers:** All course numbers may only be used once for a course in order to allow our repeat course audit to work properly. Before submitting a form for a new course or renumber, please make sure the course number is available. Please remember Purdue now uses 5-digit course numbers to allow more options for the departments. This may be verified through the following:



Legacy Course Catalog: <https://www.purdue.edu/registrar/legacy/catalog.cfm>

Banner Course Catalog: <https://selfservice.mypurdue.purdue.edu>

<b>Subject Code*</b>	MSE	<b>Course Number*</b>	27000
<b>Long Title*</b>	Atomistic Materials Science		
<b>Short Title (max 30 characters)</b>	Atomistic Materials Science		

**Multiple Campuses: There is only one version of a course in the catalog!** Forms requesting title, credit, schedule type, description, renumber or attribute modifications for courses offered at multiple campuses, **must** be agreed upon by all involved, otherwise the request will be denied and no change will be made. If agreed, the modification will be made and will affect all campuses, not just the campus requesting the change. Standard turnaround time for all approvals/denials is 30 days.

<b>Terms Offered (Check all that apply)</b>	<input checked="" type="checkbox"/> Fall <input checked="" type="checkbox"/> Spring <input type="checkbox"/> Summer
---	---

### Credit Hours

<b>Credit Hours</b>	3.00
<b>Course Repeat Status</b>	<input type="checkbox"/> Course may be repeated <input checked="" type="checkbox"/> Course may not be repeated
<b>If repeatable, is this:</b>	<input type="checkbox"/> Unlimited <input checked="" type="checkbox"/> Maximum Repeatable Credit
<b>Maximum Credit Amount</b>	
<b>Grade Mode (Select all that apply)</b>	<input checked="" type="checkbox"/> Regular Grade <input checked="" type="checkbox"/> Pass/No Pass Option <input checked="" type="checkbox"/> Audit <input type="checkbox"/> Satisfactory/Unsatisfactory

**Course Fees:** The following fees are provided on the form: Coop, Lab, and Rate Request. In order to ensure the accurate fee is assessed on a course, the Bursar's Office would like to have an explanation included with the form along with the business manager's contact information if additional information is needed.

--

<b>Additional Fees</b>	<input type="radio"/> Yes
	<input checked="" type="radio"/> No

<b>Attributes (Select all that apply)</b>	<input type="checkbox"/> Variable Title
	<input type="checkbox"/> Honors
	<input type="checkbox"/> Full-Time Privileges
	<input type="checkbox"/> Half-Time Privileges
	<input type="checkbox"/> Internship
	<input type="checkbox"/> Coop
	<input type="checkbox"/> Parallel Coop
	<input type="checkbox"/> Credit By Exam

**Schedule Type/Credit Hour:** The following links will provide explanations of the schedule types and credit hours to assist in assigning accurate types to a course.

[Schedule Type Classifications](#)

[Credit Hour Guidelines](#)

**Use the following instructions to add schedule type or show changes for the course in the text box. Examples are listed below.**

- Schedule Type
- Minutes per Meeting
- Number of Meeting per week
- Weeks per term

Examples: (3 credit course) LEC/50min per mtg/3 mtgs per wk/16 wks per term OR (3 credit course with Lecture and Lab) LEC/50/2/16 and LAB/100/1/16

<b>Proposed Schedule Type Changes</b>	
---	--

**Restrictions/Prerequisites:** If restrictions are being requested, please provide the proper Banner codes (major, program etc.) to ensure all are accurately reflected on the course. All codes may be found on our website under [Advisors/Active PWL Major Programs](#), and [Active PWL Minors](#) links:

**Restriction Types: major, program or school codes; never use more than one**  
**Use the words "and" or "or" when filling out form instead of commas**  
**Co-requisite courses are always required to be taken at the same time**  
**Concurrent prerequisite courses may be taken during the same semester or in a previous term**  
**600-level prerequisites are not enforced, they are added to description as informational text**

**If there is an equivalent course the department would like listed with the prerequisites, that specific course will need to be specified on the form in order to have it enforced through the system.**

**Explain changes to restrictions:**

**Explain changes to requisite information:**

**Course Description**

Credit Hours: 3.00. Introductory course with an atomistic view point on material properties. Three primary class sections: bonding crystallography and statistical mechanics. Bonding topics include introduction to quantum mechanics, emphasis on understanding of metallic, ionic and covalent bonding. Crystallography topics include crystal descriptions and symmetry principles. Statistical mechanics development with application to electronic and thermodynamic properties. Typically offered Spring.

**Learning Outcomes**

(Please only provide learning outcomes if changes are being made or if they were not previously provided.)

Additional Course Information (if needed)

**Syllabus** - Attach using the directions below:

Navigate to the Proposal Toolbox at the top of the right side.

Select the "Add Files" button 

Upload file to be attached.

## Impact Report

**To see how this course impacts other departments, please run the Impact Report.**

An Impact Report may be run to determine what academic programs the course being revised are housed within. This will help determine the impact of your requested revision. Based on the results, we encourage you to contact any affected departments.

**Impact Report Instructions:**

Save changes 

Navigate to the top of the proposal to run the Impact Report.

This will assist you in answering the questions.

Is this course required on a  Yes

**Plan of Study?**  No

**Is this course a prerequisite?**  Yes  
 No

**Is this course an equivalent for a course on a Plan of Study?**  Yes  
 No

If this course is included on a Plan of Study, the proposed effective session is subject to change.

If Yes to any of the above, please contact affected departments.

**Justification for Revision**

Click on the arrow  at the top of the page to launch the proposal. *(Only launch the proposal after you completely finished.)*

### WL Catalog Use Only

**Catalog Ownership**

**Course Type**