

# **Lakehead University**Faculty of Engineering

# REQUEST REPORT

Request Tracking Number: 2014-ENG-3075 Request Title: Mech New Course Additions

[DeAcTerm[EffectiveDate]] [DeAc[RequestEffectiveDate]]
Request Status: In Workflow
Request can't be split

# **Request Contents**

Туре		Title
1.	New Course	Thermal Sciences
2.	New Course	Engineering Physics

# **Request History**

Workflow Step	Workflow Action	User	Change Made	Comments	Date
Initiator	Approved	Laura Parker	No	Submitted to workflow	01/30/2014
Dean and Faculty Council Review Stage	Approved	David Barnett	No	approved	01/30/2014

# **Supporting Documents**

File Name	Uploaded By	Upload Date	Size
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# **Supporting Documents Audit Trail**

File Name	User	Date	Action

# **Notes**

Date	User	Note
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1. New Course

Engineering 2XXXX - Thermal Sciences

# **Course Details**

Engineering 2XXXX - Thermal Sciences

Start Term: Fall 2014

End Term: No Specified End Date

# **Course Details**

#### Code

Engineering 2XXXX

#### Title

Thermal Sciences

## **Description**

Basic concepts of thermodynamics; heat work and mass. Evaluating properties of gases and compressible substances. First law of thermodynamics and applications; closed and open system analysis. Introduction to heat transfer mechanisms; conduction, convection and radiation heat transfer. One-dimensional steady-state conduction in basic geometries with different boundary conditions and solving related problems. Generalized thermal resistance networks.

#### **End Term**

No Specified End Date

#### Institution

Lakehead University

#### Faculty

Faculty of Engineering

# CreditWeight

0.5

## Rationale

To comply with accreditation requirements. Combining 2 course into one; will reduce the number of makeup courses for some college transfer students.

# **Requiredor Elective**

Required

## **Cross List**

# Offering

3-1; 0-0

#### **Prerequisites**

# Corequisites

Notes
SpecialTopicDropdown
GradeSchemePF
EffectonEnrolmentINIT
No
EffectonEnrolmentOTHER
NO
AdditionalTeachingSpace
No
EffectonTeachingLoads
No
EffectionServices
No
DirectinkindSupport
No

2. New Course Engineering 3XXXX - Engineering Physics

# **Course Details**

Engineering 3XXXX - Engineering Physics

Start Term: Fall 2014

End Term: No Specified End Date

Course	Details
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#### Code

**Engineering 3XXXX** 

#### Title

**Engineering Physics** 

## **Description**

Periodic Motion; simple harmonic motion, resonance, elasticity. Vibration in elastic bodies. Nature of Waves; reflection, transmission, absorption and interference. Sound and Noise; intensity, shock wave and Doppler Effect. Optics; nature of light, colour, diffraction, interference and polarization.

# **End Term**

No Specified End Date

#### Institution

Lakehead University

# **Faculty**

Faculty of Engineering

# CreditWeight

0.5

### Rationale

To replace the science elective course in 3rd year to comply with accreditation requirements increasing Engineering natural science.

# **Requiredor Elective**

Required

### **Cross List**

# Offering

3-1; 0-0

#### **Prerequisites**

# Corequisites

Notes
SpecialTopicDropdown
GradeSchemePF
EffectonEnrolmentINIT
No
EffectonEnrolmentOTHER
Yes - will slightly reduce enrolment in other science courses
AdditionalTeachingSpace
No
EffectonTeachingLoads
No
EffectonServices
No
DirectinkindSupport
NO