

THTR135 : Intelligent Lighting

General Information

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Course Code (CB01) :	THTR135
Course Title (CB02) :	Intelligent Lighting
Department:	T ART
Proposal Start:	Fall 2026
TOP Code (CB03) :	(1006.00) Technical Theater*
CIP Code:	(50.0502) Technical Theatre/Theatre Design and Technology.
SAM Code (CB09) :	C - Clearly Occupational
Distance Education Approved:	No
Will this course be taught asynchronously?:	No
Course Control Number (CB00) :	CCC000644458
Curriculum Committee Approval Date:	10/08/2025
Board of Trustees Approval Date:	11/11/2025
Last Cyclical Review Date:	02/28/2024
Course Description and Course Note:	THTR 135 is the study of intelligent lighting instruments and their use in the live entertainment industry. Students learn a detailed breakdown of the various instruments, such as Moving and Color-Changing lighting instruments. The course includes the common practices associated with intelligent lighting equipment in the field and the use of these instruments in live events, concerts, and theatrical performances.
Justification:	Content Change
Academic Career:	<ul style="list-style-type: none"> • Credit
Mode of Delivery:	<ul style="list-style-type: none"> • In-Person
Author:	<ul style="list-style-type: none"> • Gunter, Melody
Course Family:	Scenic and Lighting, Technical Theatre: Stagecraft/Building

Academic Senate Discipline

Primary Discipline:	<ul style="list-style-type: none"> • Theater Arts
Alternate Discipline:	<ul style="list-style-type: none"> • Stagecraft
Alternate Discipline:	No value

Course Development

Basic Skill Status (CB08)

Course is not a basic skills course.

Allow Students to Gain Credit by Exam/Challenge

Course Special Class Status (CB13)

Course is not a special class.

Pre-Collegiate Level (CB21)

Not applicable.

Grading Basis

- Grade with Pass / No-Pass Option

Course Support Course Status (CB26)

Course is not a support course

General Education and C-ID

General Education Status (CB25)

Not Applicable

Transferability

Transferable to both UC and CSU

Transferability Status

Approved

Units and Hours

Summary

Minimum Credit Units (CB07)	3
Maximum Credit Units (CB06)	3
Total Course In-Class (Contact) Hours	90
Total Course Out-of-Class Hours	72
Total Student Learning Hours	162

Credit / Non-Credit Options

Course Type (CB04)

Credit - Degree Applicable

Noncredit Course Category (CB22)

Credit Course.

Noncredit Special Characteristics

No Value

Course Classification Code (CB11)

Credit Course.

Variable Credit Course

Funding Agency Category (CB23)

Not Applicable.

Cooperative Work Experience Education

Status (CB10)

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	2	4
Laboratory Hours	3	0
Studio Hours	0	0

Course Student Hours

Course Duration (Weeks)	18
Hours per unit divisor	54
Course In-Class (Contact) Hours	
Lecture	36

Laboratory	54
Studio	0
Total	90
Course Out-of-Class Hours	
Lecture	72
Laboratory	0
Studio	0
Total	72

Time Commitment Notes for Students

No value

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Prerequisites, Corequisites, Recommended Corequisites, and Recommended Preparation

No Value

Entry Standards

Entry Standards	Description
No value	No value

Course Limitations

Cross Listed or Equivalent Course	Description
No value	No value

Requisite Validation

Upload Statistical Validation and/or other documents (if necessary)

No Value

Specifications

Methods of Instruction

Methods of Instruction Lecture

Methods of Instruction Laboratory

Methods of Instruction Collaborative Learning

Methods of Instruction Demonstrations

Methods of Instruction Discussion

Out of Class Assignments

- Observation of intelligent lighting used live
- Written assignments, such as critiques of live performances
- Participation in or observation of live events on campus using intelligent lighting

Methods of Evaluation

Description of Activity/Interaction

Exam/Quiz/Test	Midterm Exam
Project/Portfolio	Individual projects based on the implementation of intelligent lighting
Writing Assignment	Written critiques based off of the observation of live theatre events that implement intelligent lighting
Other	Practical class work surrounding the hands-on use of intelligent lighting
Exam/Quiz/Test	Final Exam
Exam/Quiz/Test	Quizzes based on lecture, readings, and course material

Textbook Rationale

This is a classic text. It is the standard text for Automated Lighting. There is no equivalent.

Textbooks

Author	Title	Publisher	Date	ISBN
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Cadena, Richard	Automated Lighting: The Art and Science of Moving and Color-Changing Lights	Routledge	2017	9781138850903
<p>Other Instructional Materials (i.e. OER, handouts)</p> <p>No Value</p>				

<p>Learning Outcomes</p>	
<p>Course Objectives</p>	
<p>Analyze the inner workings of an intelligent light in order to better understand the relationship of each component in a single fixture.</p>	
<p>Experiment with a variety of intelligent lighting instruments in order to understand their differences and similarities.</p>	
<p>Inspect the maintenance and repair of various intelligent lighting instruments in order to understand how each unit operates.</p>	
<p>Assess the capabilities of an intelligent light by programming a variety of units in order to offer lighting designers a range of options.</p>	
<p>Examine a high end computerized lighting console in order to assess the numerous capabilities of controllers.</p>	
<p>SLOs</p>	
<p>Investigate and setup a variety of intelligent lighting instruments.</p>	<p>Expected Outcome Performance: 0.0</p>
<p>Assess the maintenance and repair of various intelligent lighting instruments.</p>	<p>Expected Outcome Performance: 0.0</p>
<p>Outline the capabilities of an intelligent light for a production.</p>	<p>Expected Outcome Performance: 0.0</p>
<p>Facilitate operation of intelligent light system during a live production and show flexibility when dealing with real show situations and contingencies.</p>	<p>Expected Outcome Performance: 0.0</p>

Additional SLO Information

Does this proposal include revisions that might improve student attainment of course learning outcomes?

No

Is this proposal submitted in response to learning outcomes assessment data?

No

If yes was selected in either of the above questions for learning outcomes, explain and attach evidence of discussions about learning outcomes.

No Value

SLO Evidence

No Value

Course Content

Lecture Content

Hanging, circuiting and focusing of intelligent lighting instruments (8 hours)

Basic operation of an intelligent lighting control console (4 hours)

Control protocol signal path (4 hours)

Dissection of intelligent lighting fixtures (4 hours)

Basic electronic signal path (2 hours)

Instrument electrical requirements (2 hours)

Electronic component identification and dissection (2 hours)

Electric and Electronic tools (2 hours)

Troubleshooting procedures (2 hours)

Repair procedures (2 hours)

Maintenance procedures (2 hours)

Reading electronic schematics (2 hours)

Total: 36 hours

Laboratory/Studio Content

Laboratory Hours are used to practice the following concepts and skills covered in lecture hours.

Hanging, circuiting and focusing of intelligent lighting instruments (9 hours)

Manual override operation (1.5 hours)

Basic operation of an intelligent lighting control console (4.5 hours)

Intelligent lighting crew work (6 hours)

Control protocol signal path (4.5 hours)

Dissection of intelligent lighting fixtures (4.5 hours)

Basic electronic signal path (3 hours)

Instrument electrical requirements (3 hours)

Electronic component identification and dissection (3 hours)

Electric and Electronic tools (3 hours)

Troubleshooting procedures (3 hours)

Repair procedures (3 hours)

Maintenance procedures (3 hours)

Reading electronic schematics (3 hours)

Total: 54 hours

Additional Information

Repeatability

Not Repeatable

Justification (if repeatable was chosen above)

No Value

Is it possible this course will have a material fee?

No

I have contacted my library liaison (<https://campusguides.glendale.edu/faculty/liaisons>):

No

What term(s) will this course be offered?

Fall

Will any additional resources be needed for this course? (Click all that apply)

- No

If additional resources are needed, add a brief description and cost in the box provided.

No Value