

# New Media

The Berkeley Center for New Media (BCNM) is an interdisciplinary research center that studies and shapes media transition and emergence from diverse perspectives. Through critical thinking and making, we cultivate technological equity and fairness in our classrooms, in our communities, and on the internet. BCNM offers two programs for graduate students at UC Berkeley, a Designated Emphasis in New Media and a Graduate Certificate.

## Designated Emphasis

BCNM's designated emphasis is for selected students from any Berkeley doctoral program. It provides enhanced skills in analyzing and/or designing future media with an awareness of historical, social, cultural, and other perspectives that might not be visible from any single disciplinary point of view. Students completing the PhD program receive the designation "in New Media" on their diplomas. New Media Designated Emphasis students are also eligible for a variety of fellowships and graduate student instructor positions through BCNM.

## Graduate Certificate

The Graduate Certificate in New Media is an addition to existing master's degree-granting programs. Students receive a certificate with the designation "Graduate Certificate Program in New Media," which certifies their successful completion of the New Media requirements. The award is posted to students' transcripts. Designed to enhance interdisciplinary graduate studies at UC Berkeley, the graduate certificate program emphasizes a critical understanding of the nature and implications of new media, broadly conceived, drawing on theories and methodologies from across the disciplinary spectrum—the arts, the humanities and social sciences, and science and engineering. The Graduate Certificate in New Media provides students with a competitive edge for some of the most desirable jobs in industry and academia and may enhance opportunities for innovative and collaborative research.

## Admission to the Designated Emphasis

Any UC Berkeley PhD student in good standing may apply. Admission to the BCNM Designated Emphasis program is determined by the BCNM DE Academic Programs Committee. Applications are accepted twice a year, with deadlines for admission on March 1 and November 1. To apply, students must send the following to the Berkeley Center for New Media:

- letter of intent,
- curriculum vitae,
- letter of recommendation from their UC Berkeley faculty adviser,
- Berkeley course transcript,
- BCNM course requirements worksheet,
- BCNM application form.

## Admission to the Masters Certificate Program

Any UC Berkeley master's student in good standing may apply. Applications are accepted twice a year, with deadlines for admission on March 1 and November 1. To apply, students should send the following through to the Berkeley Center for New Media:

- letter of intent,
- curriculum vitae,

- letter of recommendation from their UC Berkeley faculty adviser,
- Berkeley course transcript,
- BCNM course requirements worksheet,
- BCNM application form.

Additionally, applicants may supplement their portfolio with their own research publications and creative productions, which pertain to the critical study of new media, in the form of DVDs, websites, and so on. Submitting a creative portfolio is optional.

## Curriculum/Coursework

### Core courses

NWMEDIA 200	History and Theory of New Media	4
AND		

NWMEDIA 201	Questioning New Media	3
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### Tech course

NWMEDIA 202	New Media Methods	3
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OR

NWMEDIA C203	Critical Making	4
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OR

NWMEDIA 204	Critical Practices: People, Places, Participation	4
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OR

NWMEDIA 205	Locative Media	4
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OR

NWMEDIA C262	Theory and Practice of Tangible User Interfaces	4
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OR

NWMEDIA C265	Interface Aesthetics	3
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OR

Selected NWMEDIA 290 courses, as subject matter allows.

### Electives

Select at least two additional 3-4 unit courses that significantly deal with new media, approved by the BCNM graduate adviser. All NWMEDIA courses automatically count towards the elective requirement.

It is possible to provide evidence of equivalent level of experience/skill in an area and request a waiver of a core course by writing a petition to the DE academic program committee, endorsed by your program adviser, describing how the requirement has been met with a previous course (include a copy of your transcript to confirm completion) or provide evidence of equivalent experience. Questions about the core requirements may be addressed to the BCNM graduate adviser, Jacob Gaboury, at gaboury@berkeley.edu.

## Qualifying Examination

Your PhD qualifying exam committee must include at least one member of the BCNM Graduate Group/Affiliated Faculty who will evaluate your knowledge related to the designated emphasis.

## Dissertation

Your PhD dissertation topic must be related to New Media and your PhD dissertation committee must include at least one member of the BCNM Graduate Group/Affiliated Faculty who can evaluate it from that perspective.

## Curriculum/Coursework

### Core Classes

Certificate students must take one of the following core seminars offered each year by BCNM:

#### Core course

NWMEDIA 200	History and Theory of New Media	4
OR		
NWMEDIA 201	Questioning New Media	3

#### Electives

Students should take two 3-4 unit graduate courses that substantially deal with new media and are approved by the Graduate Advisor. Each elective should represent a different field of the following three fields: humanities, arts/design, technology. Contact the Associate Director for a list of courses that have been approved in the past.

The following courses are pre-approved to count for electives:

NWMEDIA 202	New Media Methods	3
NWMEDIA C203	Critical Making	4
NWMEDIA 204	Critical Practices: People, Places, Participation	4
NWMEDIA 205	Locative Media	4
NWMEDIA C262	Theory and Practice of Tangible User Interfaces	4
NWMEDIA C265	Interface Aesthetics	3
NWMEDIA 290	Special Topics in New Media	1-4
NWMEDIA 291	Topics in New Media	1-4
NWMEDIA 299	Individual Study or Research	1-4

### Lyman Fellowship

The Peter Lyman Graduate Fellowship in new media, established in the memory of esteemed UC Berkeley Professor Peter Lyman, provides a stipend to a UC Berkeley PhD candidate to support the writing of his or her PhD dissertation on a topic related to new media. The fellowship is supported by donations from Professor Barrie Thorne, Sage Publications and many individual friends and faculty. Funds total approximately \$6,000 each year. More information can be found here (<http://bcnm.berkeley.edu/resources/100/the-lyman-fellowship/>).

### Summer Research Fellowships

The Center for New Media offers summer research fellowships of \$1,000 to support its graduate students' research agendas. More information can be found here (<http://bcnm.berkeley.edu/resources/101/new-media-research-fellowship/>).

### Conference Fellowships

We're proud to support our students as they share their scholarship across the globe. Each semester, the BCNM is able to offer a small subsidy for students attending the premiere conferences in their fields. To be eligible to apply, students must be presenting a paper or poster on their research at a professional conference. Grant amounts depend on the location of the conference and the number of applications received. More information can be found here (<http://bcnm.berkeley.edu/resources/477/conference-grants/>).

### Undergraduate Research Support.

Each year, graduate students have the opportunity to apply for undergraduate research assistance. We select three to four projects and fund a research assistant to support the graduate's work. The graduate student also receives \$500 for their mentoring. More information can be

found here (<http://bcnm.berkeley.edu/resources/2851/undergraduate-research-fellowship/>).

### Additional Conference and Research Support

Each year, BCNM provides seed funding for student-led conferences. These awards are available by petition to the director and program officer.

### Space

Cubicles are available by application on the fourth floor of Sutardja Dai Hall. The BCNM also administers 340 Moffitt, which can be booked for classes, office hours, seminars, and meetings.

### Community

- We are affiliated with several working groups (<http://bcnm.berkeley.edu/resources/3382/working-groups/>) across campus, including the **New Media Working Group** and the **Color of New Media Working Group**.
- We offer our Art, Technology, and Culture Colloquium (<http://atc.berkeley.edu/>), and History and Theory of New Media Lecture Series (<http://bcnm.berkeley.edu/events/22/history-theory/>) each year, as well as additional symposia. In 2020, BCNM launched its Indigenous Technologies Initiative (<https://bcnm.berkeley.edu/resources/3997/indigenous-technologies/>). Our graduate students receive reserved seats and are invited to attend speaker dinners.
- Our faculty cross schools and divisions across campus and are available to offer interdisciplinary advice and mentoring.

The BCNM strives to provide its graduate students with opportunities for teaching experience. Each year, the center employs three to six GSIs (graduate student instructors) to staff small discussions or assist with grading its three core courses.

The BCNM seeks to offer summer session courses and encourages its students to apply for these positions.

For more information, visit the Berkeley Center for New Media website (<http://bcnm.berkeley.edu/>).

### New Media

#### NWMEDIA 200 History and Theory of New Media 4 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023

This course provides a broad historical and theoretical background for new media production and practice. The class will map out theoretical approaches from different disciplines and allow graduate students to discuss and apply them to their own research projects.

#### Rules & Requirements

**Prerequisites:** Graduate standing or consent of instructor. Required for all students in the Designated Emphasis in New Media

#### Hours & Format

**Fall and/or spring:** 15 weeks - 4 hours of seminar per week

#### Additional Details

**Subject/Course Level:** New Media/Graduate

**Grading:** Letter grade.

## NWMEDIA 201 Questioning New Media 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

Held in conjunction with the Art, Technology, and Culture Colloquium which brings internationally-known speakers to campus to present their work on advanced topics in new media: <http://atc.berkeley.edu>. Students will enhance skills in questioning new media: how to think critically about new media, how to use new media resources to research pioneering work in new media, how to form incisive questions about new media, and how to evaluate and create effective presentations on topics in new media.

### Rules & Requirements

**Prerequisites:** Graduate standing or consent of instructor. Required of all students in the Designated Emphasis in New Media

**Repeat rules:** Course may be repeated for credit without restriction.

### Hours & Format

**Fall and/or spring:** 15 weeks - 1 hour of lecture and 2 hours of colloquium per week

### Additional Details

**Subject/Course Level:** New Media/Graduate

**Grading:** Letter grade.

**Instructor:** Goldberg

## NWMEDIA 202 New Media Methods 3 Units

Terms offered: Fall 2014

In this methods course we will study key languages of new media innovation, ranging from flow charts to scripting languages and circuit diagrams. Our study method involves the creation and application of sensing devices in an urban context, and engages students in establishing chains of references which connect ground truth to data, data to information, information to people, people to actions, and actions to policies. Taking into account technical, political, cultural and literacy questions we seek to connect our data production work with information needs of underserved communities in the Bay Area region.

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of seminar per week

### Summer:

6 weeks - 9 hours of seminar per week

8 weeks - 6 hours of seminar per week

10 weeks - 5 hours of seminar per week

### Additional Details

**Subject/Course Level:** New Media/Graduate

**Grading:** Letter grade.

## NWMEDIA C203 Critical Making 4 Units

Terms offered: Spring 2025, Spring 2022, Spring 2021, Spring 2020, Spring 2019, Spring 2018

Critical Making will operationalize and critique the practice of “making” through both foundational literature and hands on studio culture. As hybrid practitioners, students will develop fluency in readily collaging and incorporating a variety of physical materials and protocols into their practice. Students will envision and create future computational experiences that critically explore social and culturally relevant technological themes. No previous technical knowledge is required to take this course. Class projects involve basic programming, electronic circuitry, and digital fabrication design. Tutorials and instruction will be provided, but students will be expected to develop basic skills in these areas to complete course projects.

### Hours & Format

**Fall and/or spring:** 15 weeks - 2 hours of lecture and 2 hours of studio per week

### Summer:

6 weeks - 4 hours of lecture and 8 hours of studio per week

8 weeks - 4 hours of lecture and 4 hours of studio per week

10 weeks - 3 hours of lecture and 3 hours of studio per week

### Additional Details

**Subject/Course Level:** New Media/Graduate

**Grading:** Letter grade.

**Formerly known as:** New Media 203

**Also listed as:** MEC ENG C205

## NWMEDIA 204 Critical Practices: People, Places, Participation 4 Units

Terms offered: Spring 2022, Fall 2019

Critical Practices is a hands-on studio design course where students work at the intersection of technological innovation and socially engaged art. Students will integrate a suite of digital fabrication tools with social design methods to create work that engages in cultural critique. Working with innovative technologies and radical, new art practices, this course will explore: hybrid art forms, critical design for community engagement, interventions in public spaces, tactical media, and disobedient objects. These new making strategies will reframe our notions of people, places and participation.

### Hours & Format

**Fall and/or spring:** 15 weeks - 4 hours of studio per week

### Summer:

6 weeks - 10 hours of studio per week

8 weeks - 7.5 hours of studio per week

10 weeks - 6 hours of studio per week

### Additional Details

**Subject/Course Level:** New Media/Graduate

**Grading:** Letter grade.

## NWMEDIA 205 Locative Media 4 Units

Terms offered: Fall 2023, Fall 2022, Fall 2021

From postcards and maps to mobile phones, this course considers the history and future of locative media, as technological, situated, and navigational ways of expressing and understanding space, location, and bodies.

This is a theory and making course. It is designed to help students traverse the nuances between a) critically engaging with theoretical ideas and implementing the questions that they raise into their practice and b) critically engaging with the technological production of space and place, and implementing the questions that it raises into theory.

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of seminar per week

### Summer:

6 weeks - 7.5 hours of seminar per week

8 weeks - 6 hours of seminar per week

10 weeks - 4.5 hours of seminar per week

12 weeks - 4 hours of seminar per week

### Additional Details

**Subject/Course Level:** New Media/Graduate

**Grading:** Letter grade.

## NWMEDIA C262 Theory and Practice of Tangible User Interfaces 4 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

This course explores the theory and practice of Tangible User Interfaces, a new approach to Human Computer Interaction that focuses on the physical interaction with computational media. The topics covered in the course include theoretical framework, design examples, enabling technologies, and evaluation of Tangible User Interfaces. Students will design and develop experimental Tangible User Interfaces using physical computing prototyping tools and write a final project report.

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of lecture and 1 hour of laboratory per week

### Additional Details

**Subject/Course Level:** New Media/Graduate

**Grading:** Letter grade.

**Instructor:** Ryokai

**Also listed as:** INFO C262

## NWMEDIA C265 Interface Aesthetics 3 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023

This course will cover new interface metaphors beyond desktops (e.g., for mobile devices, computationally enhanced environments, tangible user interfaces) but will also cover visual design basics (e.g., color, layout, typography, iconography) so that we have systematic and critical understanding of aesthetically engaging interfaces. Students will get a hands-on learning experience on these topics through course projects, design critiques, and discussions, in addition to lectures and readings.

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of lecture per week

### Additional Details

**Subject/Course Level:** New Media/Graduate

**Grading:** Letter grade.

**Instructor:** Ryokai

**Also listed as:** INFO C265

## NWMEDIA 290 Special Topics in New Media 1 - 4 Units

Terms offered: Fall 2025, Spring 2025, Fall 2024

See Schedule of Classes for current section offerings. Topics deal with new media and related issues.

### Rules & Requirements

**Repeat rules:** Course may be repeated for credit when topic changes.

### Hours & Format

**Fall and/or spring:** 15 weeks - 1-4 hours of lecture per week

### Summer:

3 weeks - 5-15 hours of lecture per week

8 weeks - 1.5-7.5 hours of lecture per week

10 weeks - 1.5-4.5 hours of lecture per week

### Additional Details

**Subject/Course Level:** New Media/Graduate

**Grading:** Letter grade.

## NWMEDIA 291 Topics in New Media 1 - 4 Units

Terms offered: Prior to 2007

See Schedule of Classes for current section offerings. Topics deal with new media and related issues.

### Rules & Requirements

**Repeat rules:** Course may be repeated for credit when topic changes. Students may enroll in multiple sections of this course within the same semester.

### Hours & Format

**Fall and/or spring:** 15 weeks - 1-2 hours of seminar and 1-2 hours of discussion per week

### Summer:

6 weeks - 2.5-6 hours of seminar and 2.5-4 hours of discussion per week

8 weeks - 2-4.5 hours of seminar and 2-3 hours of discussion per week

10 weeks - 1.5-3 hours of seminar and 1.5-3 hours of discussion per week

12 weeks - 1.5-2.5 hours of seminar and 1.5-2.5 hours of discussion per week

### Additional Details

**Subject/Course Level:** New Media/Graduate

**Grading:** Letter grade.

## NWMEDIA 299 Individual Study or Research 1 - 4 Units

Terms offered: Spring 2019, Spring 2018, Spring 2017

Individual study or research with Center for New Media- affiliated faculty.

This course provides the opportunity to search out and study in detail subjects unavailable in the ordinary course offerings. Unit credit will reflect comparable work per unit as regular courses, and will include both meetings with faculty sponsor and independent work.

### Rules & Requirements

**Repeat rules:** Course may be repeated for credit when topic changes.

### Hours & Format

**Fall and/or spring:** 15 weeks - 1-4 hours of independent study per week

**Summer:** 8 weeks - 1.5-7.5 hours of independent study per week

### Additional Details

**Subject/Course Level:** New Media/Graduate

**Grading:** Letter grade.