

# CIS DEPARTMENT ADVISORY MEETING

LOCATION: Online through Zoom

DATE: December 5, 2025

TIME: 11:00 AM

## MEETING MINUTES

<b>ATTENDEES:</b>	Mehrak	Amirfazlian	Cerritos College, Adjunct Faculty
	Jesse	Cooper	Software Engineer Manager, ScienceLogic Inc.
	Delara	Daryaei	Cerritos College, Adjunct Faculty
	Jolene	James	Systems Analyst, Proponent Inc
	Kenny	Lou	Professor, Cerritos College
	Dean	Mellas	Professor, Cerritos College
	Fadi	Muheidat	Full-Time Faculty, CSU-San Bernardino
	Phuong	Nguyen	Professor, Cerritos College
	James	Stanger	Chief Technology Evangelist, CompTIA

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### Summary

- The CIS department is introducing two new programs: **Applied Data Science** and **Applied AI**, both planned to start in Fall 2026
- The committee approved both new programs with unanimous votes
- The **Client-Side Web Development certificate** is experiencing low enrollment and needs rebranding
- Industry trends indicate that AI literacy is becoming essential across all fields
- Full-stack development (particularly MERN stack) was identified as a more marketable skill than client-side web development alone
- The job market is cautious but still hiring, with emphasis on problem-solving skills rather than specific technologies

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## DISCUSSED TOPICS

### CIS Department Programs Overview

**Kenny** provided an overview of the department's current programs and upcoming additions.

- **Details**

- **Kenny:** Presented the department's two major areas: CS (Computer Science) and IT (Information Technology)
- **Kenny:** CS area includes client-side web development, CS Transfer, computer science degree, and programmer degree/certificate
- **Kenny:** IT area includes IT Support Specialist, network system administration, Cloud Computing Certificate, and cybersecurity degree/certificate
- **Kenny:** Announced two new programs: Applied Data Science and Applied AI, planned for Fall 2026
- **Conclusion**
  - The department offers comprehensive programs covering both CS and IT tracks
  - Two new programs are being developed to address emerging technology needs

## Applied Data Science Program

**Phuong Nguyen** presented the upcoming Applied Data Science program.

- **Details**
  - **Phuong Nguyen:** The program will offer both an AS degree and Certificate of Achievement starting Fall 2026
  - **Phuong Nguyen:** Emphasized that as a community college, they will focus on basic, not advanced material
  - **Phuong Nguyen:** Required courses include statistics, programming, database management systems, and data analysis/visualization with Python
  - **Phuong Nguyen:** Mentioned developing a potential machine learning course that might be required or elective
  - **Phuong Nguyen:** Noted that the program prepares students for entry-level careers or transfer to four-year universities
- **Conclusion**
  - The committee unanimously approved the Applied Data Science program
  - The program will focus on foundational skills while preparing students for further education or entry-level positions

## Applied AI Program

**Kenny** presented the upcoming Applied AI program.

- **Details**
  - **Kenny:** The program aims to provide AI literacy to the general student population, not just CS/IT majors
  - **Kenny:** Outlined four courses: general AI for everyone (172), AI for productivity and workflow automation, AI for data analysis, and AI for application development
  - **Fadi:** Explained that the final course (172D) would function as a capstone project where students work on real-time projects related to their interests
  - **Phuong Nguyen:** Emphasized the importance of keeping course descriptions generic rather than tied to specific software to avoid frequent curriculum updates
- **Conclusion**
  - The committee unanimously approved the Applied AI program
  - The program will focus on practical applications of AI across various fields

# Industry Trends and Labor Market Insights

**James** shared insights on current industry trends and the job market.

- **Details**
  - **James:** Identified automation (including AI and tools like Ansible, Chef, Puppet) as a major trend
  - **James:** Highlighted identity access management and social engineering as key cybersecurity concerns
  - **James:** Noted that AI is impacting entry-level jobs, raising questions about career entry points
  - **James:** Explained regional differences in AI adoption: US focuses on efficiency, Japan on customer experience, Europe on regulation
  - **James:** Discussed the trend of "geo-repatriation of data" where countries want to keep citizen data physically within their borders
  - **Jesse:** Added that AI will significantly impact front-end development
  - **Phuong Nguyen:** Emphasized that AI will create jobs for those who know how to design, update, and maintain AI systems
  - **Jesse:** Compared AI to calculators, suggesting it makes workers more powerful rather than replacing them
- **Conclusion**
  - AI is transforming industries but creating new opportunities for those with the right skills
  - Systems thinking, process thinking, and communication skills are increasingly valuable
  - Companies are looking for workers who can solve problems using technology

## Job Market and Hiring Trends

**The committee** discussed current hiring practices and job market conditions.

- **Details**
  - **James:** Noted that companies have been cautious about hiring in 2025 due to global uncertainty
  - **James:** Emphasized that technology is no longer a "nice-to-have" but business-critical
  - **Jesse:** Mentioned his company recently let go of workers due to political climate and government contracts
  - **Jesse:** Noted they've been hiring overseas contractors rather than onshore employees
  - **Jolene:** Shared that her aerospace company is still hiring and has high demand
  - **Jolene:** Mentioned they've had better experiences with certificate holders than four-year degree graduates
  - **Phuong Nguyen:** Emphasized that companies hiring entry-level positions look for critical thinking, problem-solving, flexibility, and teamwork
- **Conclusion**
  - The job market is cautious but still hiring, especially for those who can demonstrate problem-solving abilities
  - Certificates can be valuable for entering the workforce without extensive debt
  - Companies value soft skills alongside technical knowledge

# Client-Side Web Development Certificate Review

The **committee** discussed the low enrollment in the Client-Side Web Development certificate and potential improvements.

- **Details**
  - **Kenny:** Noted the program has low enrollment and student interest
  - **Roni:** Confirmed declining enrollment in HTML and CSS courses despite using modern tools like Visual Studio and GitHub
  - **Dean:** Explained that individual classes like JavaScript and HTML were once popular but have seen declining interest
  - **Jesse:** Suggested that front-end development is shifting toward frameworks like React and will be significantly impacted by AI
  - **Phuong Nguyen:** Proposed developing a new Full-Stack Development certificate using MERN stack (MongoDB, Express, React, Node.js)
  - **Jesse:** Shared that in recent hiring, candidates with React skills were preferred over those with only JavaScript/CSS skills
  - **Kenny:** Emphasized the importance of program branding and suggested "Web Application Development" as a more attractive name
- **Conclusion**
  - The department will work to rebrand the Client-Side Web Development certificate
  - Content will be updated to include AI frameworks and modern development tools
  - A new Full-Stack Development certificate will be developed focusing on MERN stack
  - The term "Web Application Development" was suggested as more marketable than "Client-Side Web Development"

## Action items

- **Phuong Nguyen**
  - Develop a new Full-Stack Development certificate program using MERN stack (React and Node.js) for Spring 2027
  - Work with Roni and others to modify the Client-Side Web Development certificate name and content
- **Kenny Lou and Department**
  - Implement the Applied Data Science program for Fall 2026
  - Implement the Applied AI program for Fall 2026
  - Review and update content for CIS160, CIS162, and CIS164 courses
  - Add AI frameworks to web development courses
- **Roni**
  - Incorporate AI tools for web page generation into courses
  - Consider adding Microsoft virtual machines to course content