



Computer Information Systems Advisory Committee Meeting

Monday, May 16, 2022

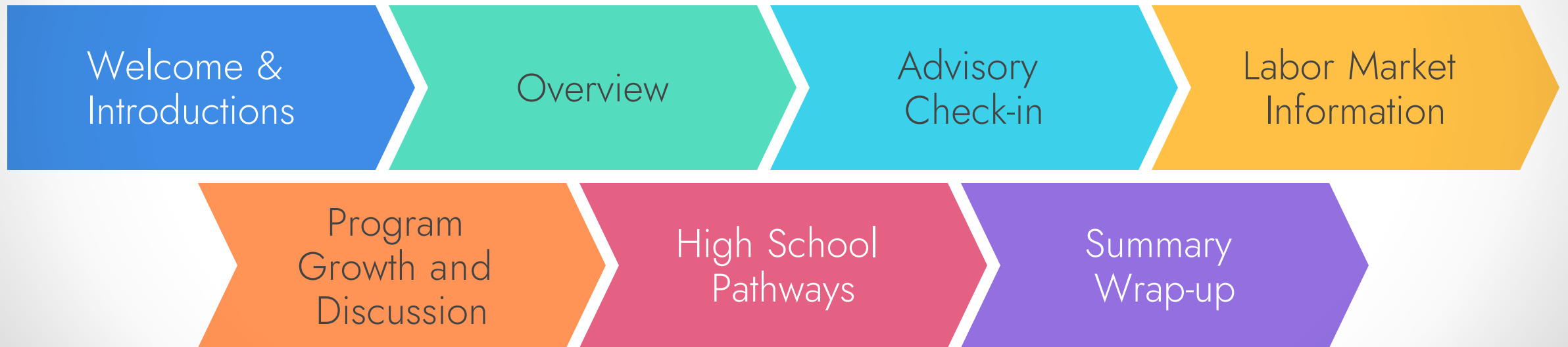


Hello!

Please share your name, role, organization.

AGENDA

Where We Are. Where We're Going.



Overview

Alina Varona, Dean of Career Education and Workforce Development

Overview of Career Education and Workforce Development

Prepare students with skills for 21st century jobs, careers, and the future of work

Degrees and Certificates

- **Create Pathways & Support Momentum**

Short Term Training and Workforce Development

- **Respond In-Time to Labor Market Needs and Connect to Employment**

Non Credit Education

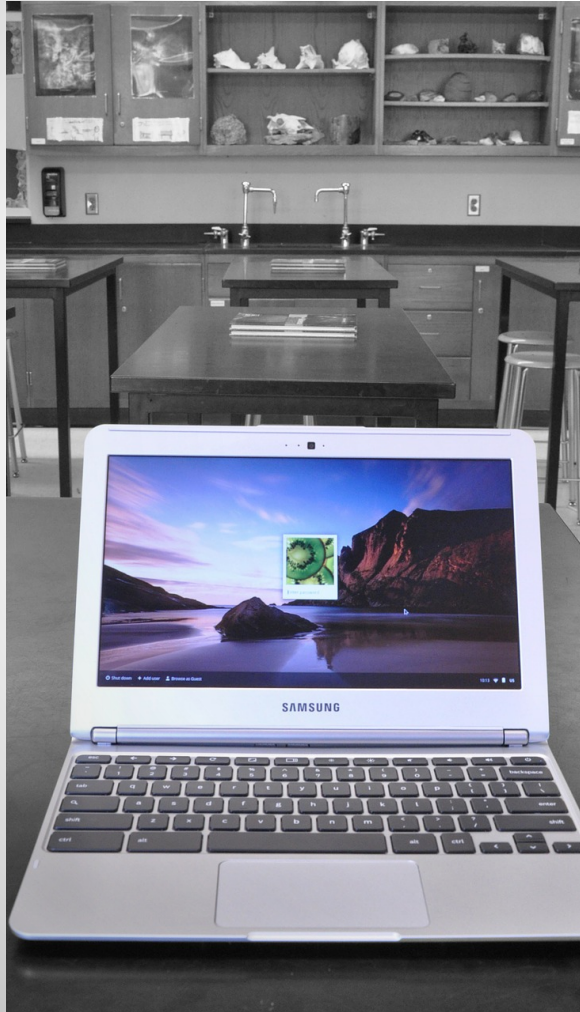
- **Ladder and Bridge to Basic Skills, Work, and Credit**

2.1 million students at 116 colleges

[HTTPS://WWW.CCCCO.EDU/ABOUT-US/CHANCELLORS-OFFICE/DIVISIONS/WORKFORCE-AND-ECONOMIC-DEVELOPMENT](https://www.cccco.edu/about-us/chancellors-office/divisions/workforce-and-economic-development)

Career Education: Programs

[://workforce.marin.edu](http://workforce.marin.edu)



- Administration of Justice
- Auto & Industrial
 - Auto Collision Repair; Auto Technology; Electronics; Machine & Metals
- Computers & Multimedia
 - Computer Information Systems; **Graphic Design; 3D, Video, Game Dev; Web Design and Development;** MS Office Certification; Cyber Security
- Court Reporting
- Health Sciences
 - Dental Assisting; Emergency Medical Technician Training; Medical Assisting
- Organic Farming
- Education 2 Career (E2C)
 - Construction Program
- Summer Career Academies
- Short-Term Career Training Programs (12 Weeks)
 - Business Start-Up; Small Business Management; Office Technology: online selling, accounting, office applications, social media marketing

WHY ADVISORY COMMITTEES?

Centering the Community in Community College Practice and Programs

Title 5: §55601[1]

- The governing board of each community college district participating in a vocational education program shall appoint a vocational education advisory committee
- Committee will develop recommendations on the program and be a liaison between the district and potential employers.

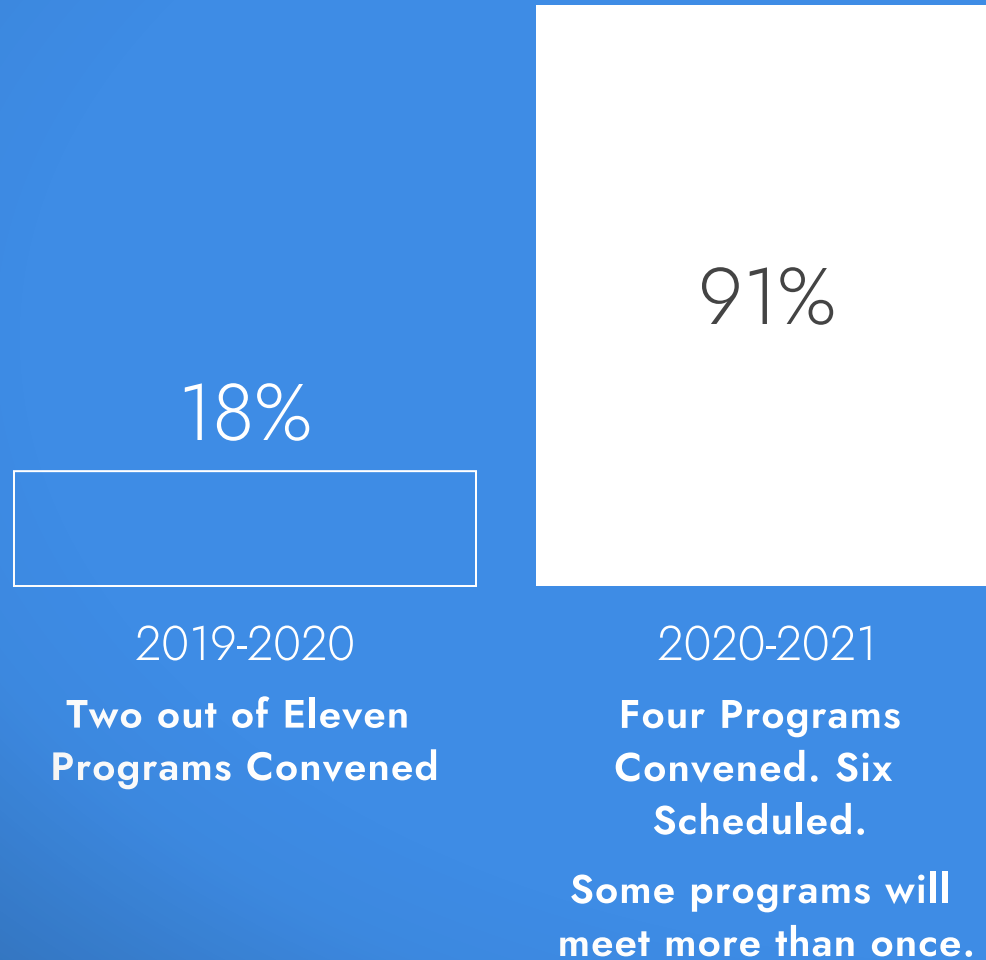
Committee Members

- Shall have one or more representatives of the general public
- Must be knowledgeable about the educational needs of disadvantaged populations
- Students, teachers, business, industry, the college administration, and the field office of the Employment Development Department

Funding Requirements

- Extensive business and industry involvement
- Evidenced by not less than one annual business and industry advisory committee meeting
- (Section 135(b) of Perkins IV[2]).

Meaningful Advisory Committee Participation



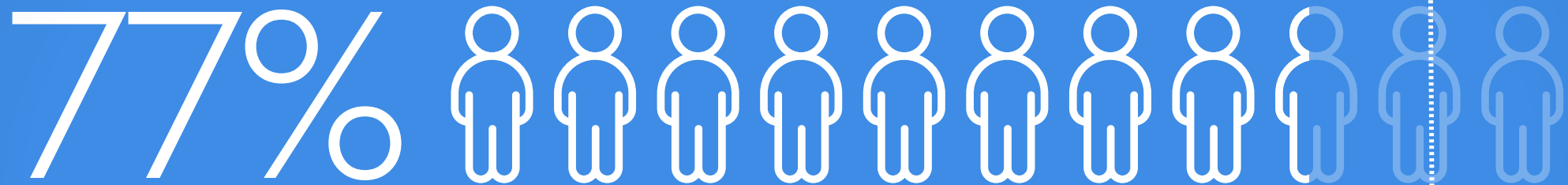
35% increase in advisory member participation to date



EMPLOYMENT DATA

18 months after college completion-

85% Goal



Found a job very closely or closely related to their field.



Reported job is not closely related to their field.

What is **Computer Information Systems** (CIS)?

- Courses provide “hands-on” computer use that emphasizes the development of the skills necessary for employment and personal use of computers.
- Program specialties include desktop network, desktop publishing, microcomputer manager, and microcomputer programmer.
- Curriculum touches upon:



Languages/Applications	Courses also cover:
JAVA	Cascading Screen Style (CSS)
JavaScript	Content Management Systems
HTML	Integrated Drive Electronics
PYTHON	SEO
SQL	Security
BASIC	
WordPress	

Enrollments by Program

Academic year **2020-2021** unduplicated headcount by program

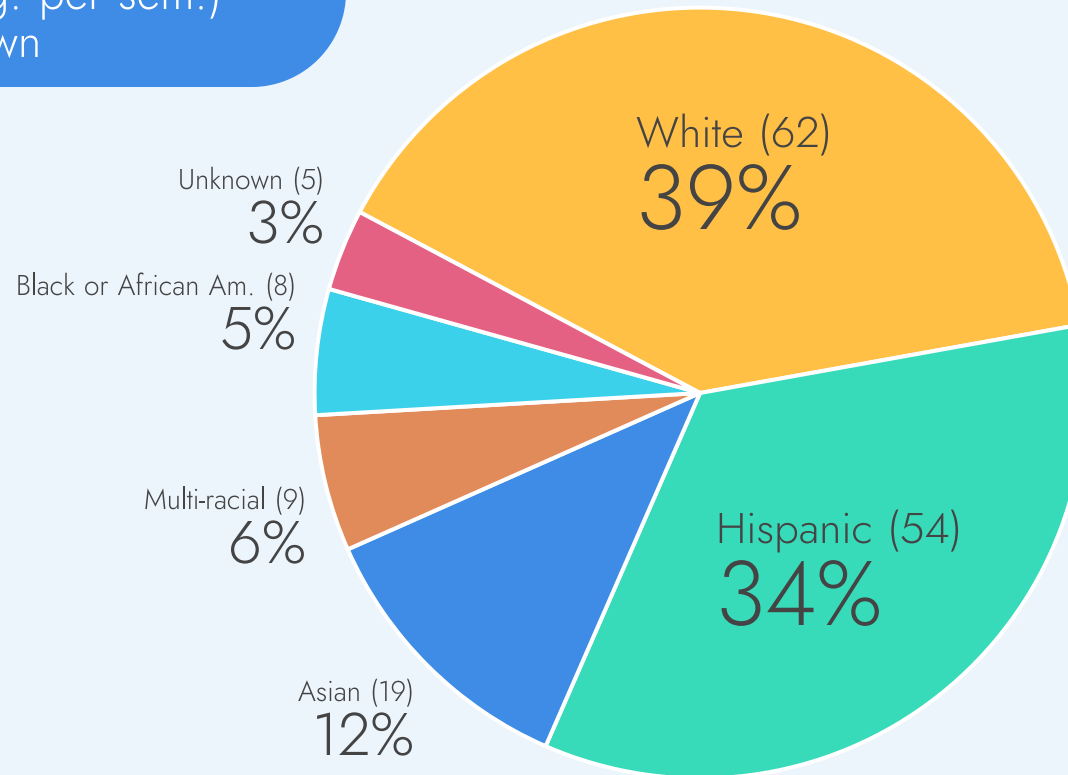


Average Student Demogr

Computer Information Systems

2018 - 2021

40% Male (63 avg. per sem.)
58% Female (92 avg. per sem.)
2% Unknown



CHARACTERISTICS

Gender: Male 39%

Female 60%;

Median Age: 23

Race/Ethnicity:

Asian: 487 (7%)

Black/African

American: 207 (3%)

**Hispanic: 1,985
(30%)**

Multi-racial: 408
(6%)

Native American:
14 (0.2%)

Program Outcomes

Computer Information Systems

2018 - 2021

Persistence - First Time Students Fall to Spring

- Female: **100%**
- Male: **92%**

Program Persistence Overall:

95%

Higher than College persistence
rate: **73%** average

Course **Retention** by Gender (%)

- Female: **85%**
- Male: **82%**

Program Retention
Overall:

84%

Aligned closely to College
average at **85%**

Program Success - Awards

Fall 2018 - Spring 2021

- Certificates: **3**
- Degrees: **5**
- Transfers: **2**

Course Success -

Overall course success rate is:

76%

Aligned closely to College
average at **77%** for 2019-20

Advisory Check-In

PRIORITIES AND CURRENT LANDSCAPE

Advisory Member Share Outs & Discussion

What has this last year looked like for your field?



Staffing and Recruiting



Needs and Priorities

- What are your current priorities and needs for hiring?



Training & Professional Development



Other Key Items?

- What should we be aware of to support our future students?
- Potential technology, training, or emerging sectors?



Community Partnership & Impacts

- How should we best prepare our students to be qualified and competitive?

Labor Market Information Overview

Heather Rahman, Workforce Specialist

Regional Counties:
Marin, Napa,
Sonoma, Solano,
San Francisco and
San Mateo

Regional Labor Market Information

<http://coeccc.net/>
<https://www.onetonline.org/>

Sources: Centers of Excellence Demand Tables
and O*Net Online

Current COM CIS Offerings	Occupations (Typical Educational Requirements)	Alternative Job Titles	Average Annual Earnings	Annual Job Openings projected through 2028
A.S. Degree in Computer Information Systems	Computer Systems Analysts (Bachelor's degree)	Applications Analyst, Business Systems Analyst, ISA, IT Analyst, Systems Analyst	\$106,947	1,030
Certificate of Achievement, Computer Information Systems	Information Security Analysts (Bachelor's degree)	Information Security Officer, ISSO, IT Specialist	\$127,343	168
COMP TIA A+ Certification - Cyber Security	Computer User Support Specialists (some college)	Computer Technician, Desktop Support Technician, Help Desk Analyst, IT Specialist	\$70,111	1,199
MS Office and Adobe Certifications	Computer Occupations, All Other (Bachelor's degree)	Information Technology Project Managers, Document Management Specialists, Database Administrators	\$98,953	1,483
	Office and Administrative Support	Administrative Assistant, Office Managers, Bookkeeping, Data Management Specialist	\$56,660	6,960



Growing Our Program

Lance Barthelemy, Instructor -

Microsoft, Quickbooks and CompTIA

Certificates

Manny Kang, Doctor of Information

Technology and Instructor - CIS

Certificates/Degrees

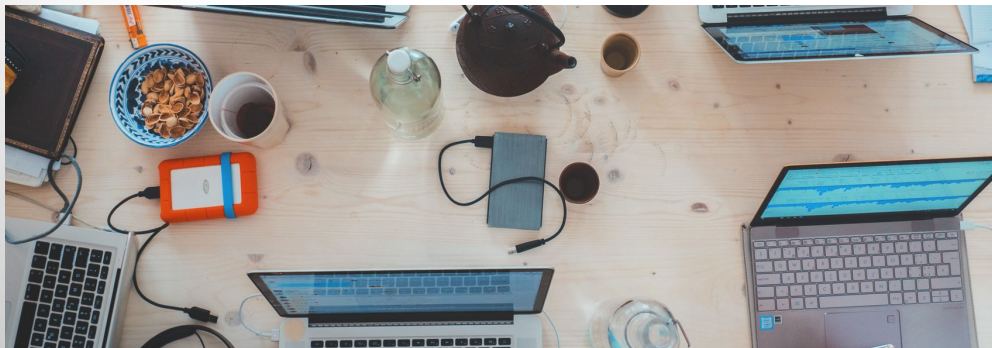
CIS Current Offerings

+ NEW:

**Quickbooks
Certification**

Degrees and Certificates of Achievement:

- **Associate's of Science Degree in Computer Information Systems** (21 units + general education courses = 60 units total)
- **Certificate of Achievement, Computer Information Systems** (21 units)

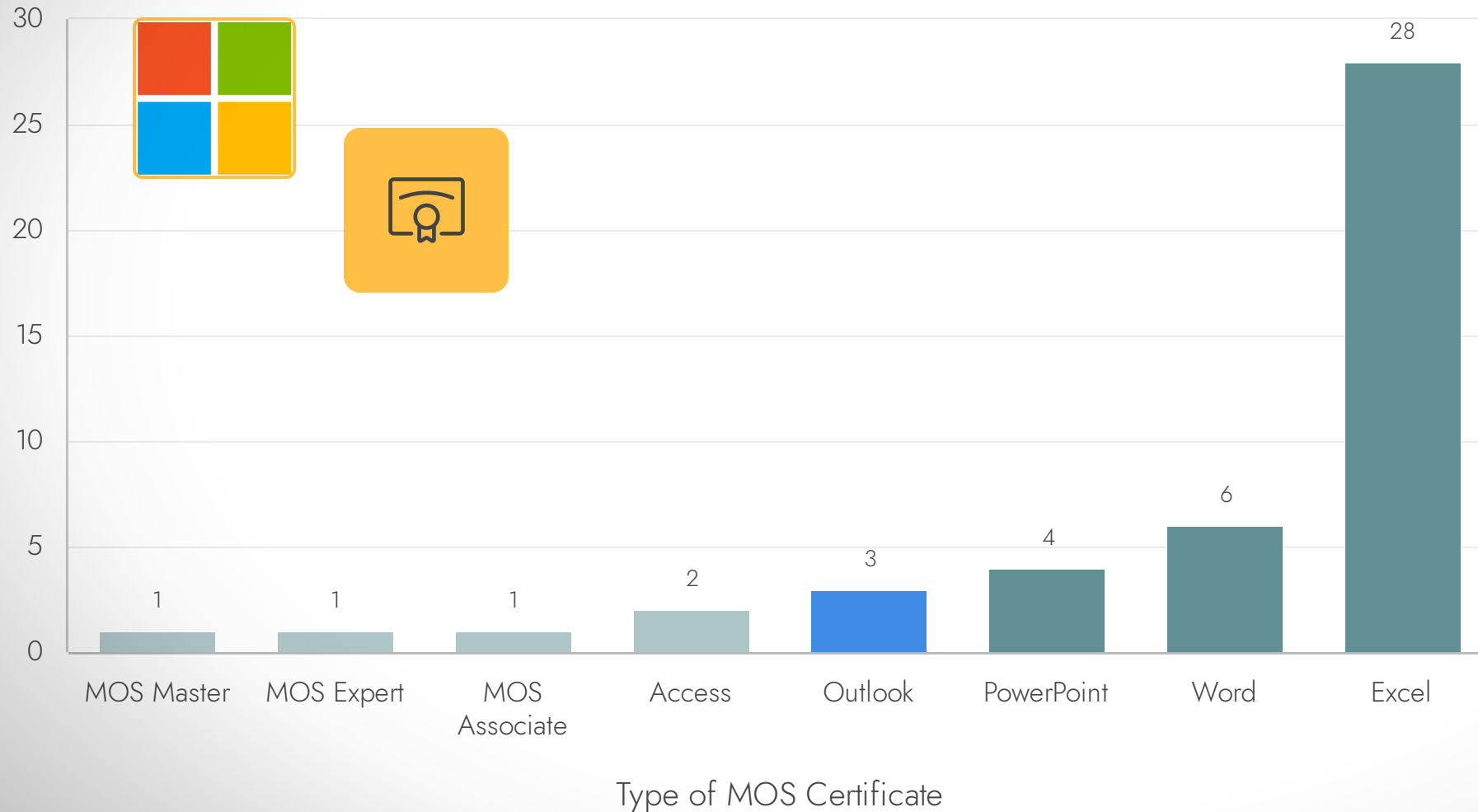


MS Office Specialist Certifications:

- **Excel** (CIS 118 & CIS 128) offered Spring and Fall Semesters.
- **Word** (CIS 102 & CIS 103) offered Spring and Fall Semesters.
- **PowerPoint** (CIS 113) offered Fall Semester
- **Access** (CIS 117 & CIS 127) offered Fall Semester.
- **Outlook** Currently, independent study using GMatrix CertPREP.

Note: After passing the exam, students will be provided with a Microsoft digital badge, certificate, and transcript. Word

2021 Microsoft Certification Awards



46
total
awards

109%
increase
since
2017

Microsoft Office Certificates



Studies show significant value for certification*

Increased graduation rates

- 97.5% with certification
- 78.4% without certification

Higher GPAs

- 3.12 with certification
- 2.78 without certification

Increased post-secondary enrollment

Improved student confidence

- How is Microsoft Office feeding into the market?
- Do partners feel these are valuable?
- Are these certificates helpful to see on a resume?
- Do they make an impact?
- What else can help students?

CompTIA Certificate

Is there a demand for CompTIA?

Cisco CompTIA A+ Certification

Take CIS 120 IT Essentials (4 units, estimated cost: \$210 in tuition and fees; \$10 in books & supplies).

Cisco Level 1 exam available thru College of Marin.

Completing your CompTIA A+ certification is excellent for helpdesk and higher positions, including entry-level networking career opportunities.



CompTIA A+

A+ is the starting point for a career in IT. The performance-based exams certify foundation skills across a variety of devices and operating systems.



CompTIA Security+

Security+ provides a global benchmark for best practices in IT network and operational security, one of the fastest-growing fields in IT.

The CompTIA logo consists of the word "CompTIA" in a red, sans-serif font. The "T" is significantly larger than the other letters. The logo is set against a light grey rectangular background.



CompTIA Network+

Network+ certifies the essential skills needed to confidently design, configure, manage and troubleshoot any wired and wireless devices.

Online Certificate/Degree Update

What's in the certificate?

21 total credits for a certificate

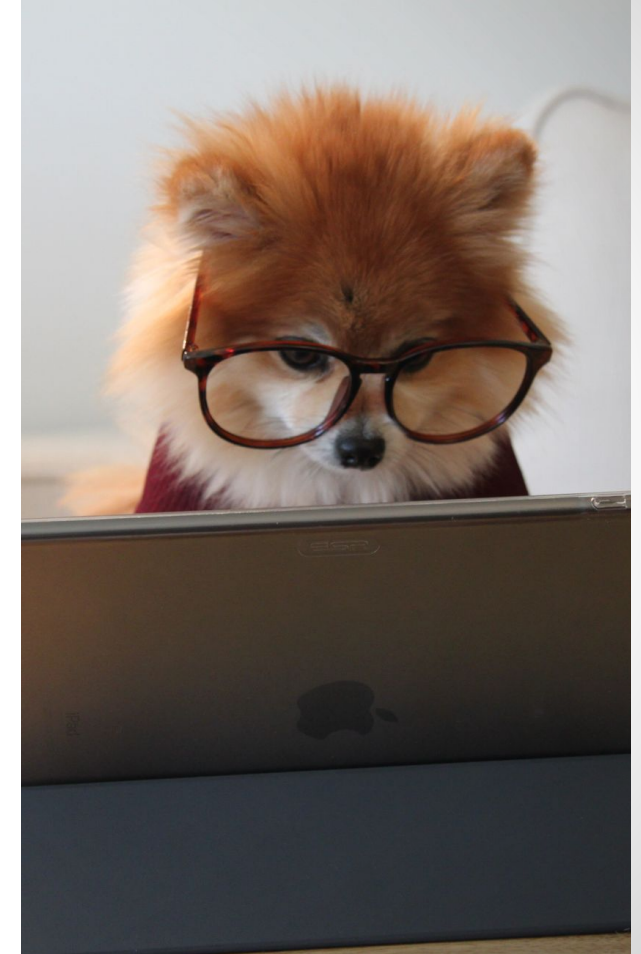
- Beginning MS Word
- Intermediate MS Word
- Intro to CIS
- MS PowerPoint Presentations and Publications
- Intro to MS Access Database Design
- Intro to MS Excel
- Intermediate MS Access Database Design
- Intermediate MS Excel Spreadsheet Design
- + 7.5 additional units from a selected list of courses

60 units total with general education courses for a Degree

Why did we move classes to be available online?

What does this certificate lead to?

When will the online courses offered?





Internships

5 key questions

1

After 1 year of CIS classes how best can a student be ready for on-the-job training/internship?

2

What skills will a student need to have at the halfway mark?

3

Do you have interest in offering an internship?

4

Do you currently have existing opportunities or the ability for hosting students?

5

What do we want the student to gain from the internship experience?

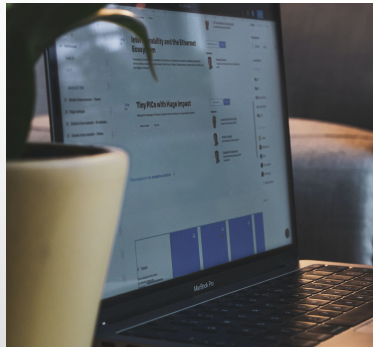
Advisory Check-In

Possible **New** Certificate

Network and System Administrator

This certificate will prepare students to work as an Information Technology professional to manage data centers, database centers and provide support to Microsoft and UNIX networks users.

Total: **14.5 units**



Would this certificate benefit students and prepare them for work?

Courses -

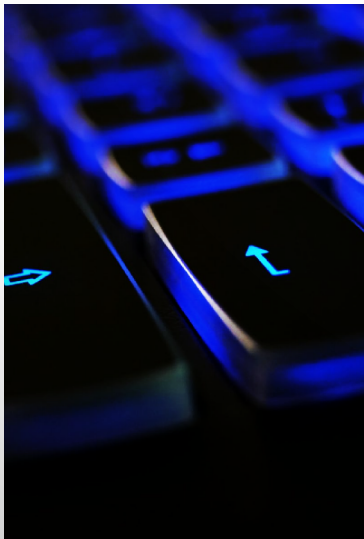
- CIS 101 : **Introduction to Personal Computers and Operating Systems** : 1.5 Units
 - CIS 126: **Introduction to Windows** : 1.5 Units. 1 lecture and 1.5 lab hrs/wk. No prerequisite. Advisory: CIS 101 or 110.
 - CIS 155A: **Systems and Network Administration** : 3 Units. 2 lecture and 3 lab hrs/wk. 3.0 Units. 2 lecture and 3 lab hrs/wk. No prerequisite. Advisory: CIS 275.
 - CIS 237: **Introduction to SQL Programming** - 1.5 Units. 1 lecture and 1.5 lab hrs/wk. No prerequisite. Advisory: CIS 137.
 - CIS 275: **Networking Fundamentals and Practices** : 3 Units. 2 lecture and 3 lab hrs/wk. No prerequisite. Advisory: CIS 170 or 110.
- CIS-XXX: **Unix System Administration** – Needs to developed – 4 units

Possible **New** Certificate

Web Software and Information Security Analyst

This certificate will prepare students to work as an Information Security professional to manage and secure private and public cloud-based application systems.

Total: **15.5 units**



Would this certificate benefit students and prepare them for work?

Courses -

- CIS 101 : **Introduction to Personal Computers and Operating Systems** 1.5 Units
- COMP 138- **Introduction to Programming- Python Programming** 4 Units
- CIS 120: **IT Essentials: PC Hardware and Software** 4.0 Units. 3 lecture and 3 lab hrs/wk. No prerequisite
- CIS 160: **Introduction to Information Systems Security** 3.0 Units. 2 lecture and 3 lab hrs/wk. No prerequisite. Advisory: CIS 275.
- CIS 215: **Visual BASIC Programming** 3.5 units

Possible **New** Degree

Cyber Security Degree



Would this degree benefit students and prepare them for work?

Who currently is offering it?

- City College of S.F.
- San Mateo Community College

How many awards/year?

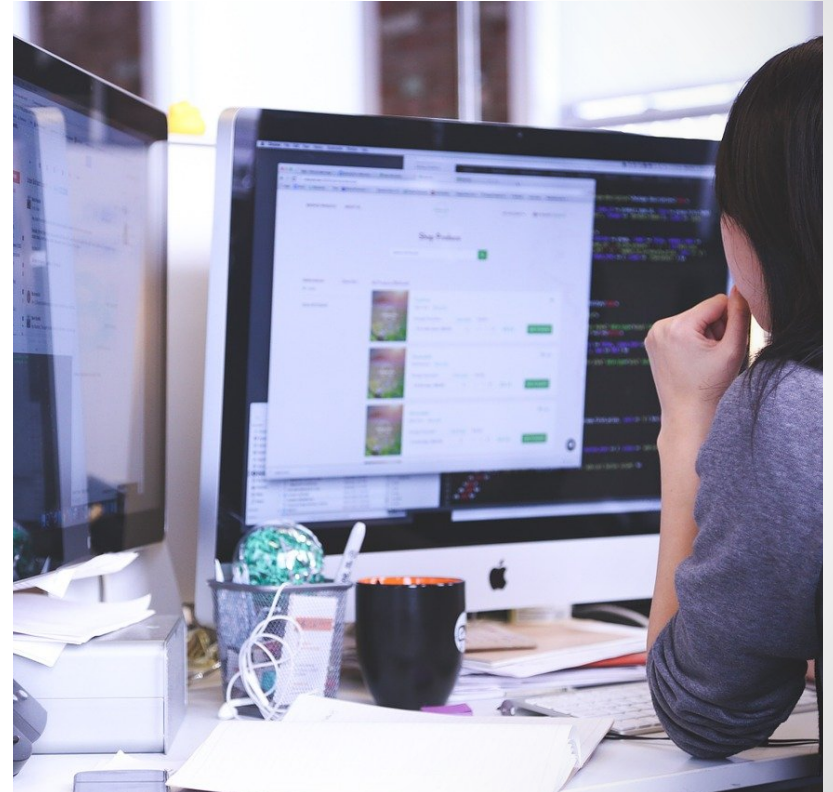
- approximately 140; less than 200

What's next for the students?

Possible **New** Software, Applications/Subscriptions

1. Virtual labs to support CompTIA training
2. MS Project software for Computerized Project Management
3. TestOut for MS Office - application used in computer labs

**What do
you
suggest?**



High School Connection

Building Pathways

High School Offerings

Currently working with local high schools to bridge their classes to College of Marin

San Marin High School:

- CISCO - IT Essentials, Networks, Switching and Routing
 - about 30 students
-

Summer Career Academies - Cyber Security Classes (Into and Intermediate)



New Pathway Sheets

Computer Information Systems

CAREERS / ANNUAL AVERAGE INCOME

- Network and Computer Systems Administration - \$95,442
- Information Security Analysts - \$107,250
- Business Operations Specialists - \$63,000
- Database Administrators - \$79,329
- Executive Administration Assistants - \$68,315

PROGRAM OFFERINGS

- Associate in Science Degree in Computer Information Systems (60.0 Units)
- Certificate of Achievement, Computer Information Systems (13.5 Units)
- Skills Certificate, Microsoft Office (10.5 units)
- Skills Certificate, Microsoft Office Database Specialist (6.0 Units)

FALL CORE CLASSES

CIS103 - Intermediate MS Word (1.5 units, CSU)
CIS110 - Intro to Computer Information Systems (3 units, CSU/UC)
CIS113 - MS PowerPoint Presentations and Publications (1.5 units, CSU)
CIS118 - Intro to MS Excel Spreadsheet Design (1.5 units, CSU)
CIS 128 - Intermediate MS Excel Spreadsheet Design (1.5 units, CSU)

SPRING CORE CLASSES

CIS102 - Beginning MS Word (1.5 units, CSU)
CIS117 - Intro to MS Access Database Design (1.5 units, CSU)
CIS127 - Intermediate MS Access Database Design (1.5 units, CSU)
+ additional 7.5 units from a selected list

* Course scheduling is subject to change. Please check with a counselor to determine your educational plan. Classes are located at IVC, KTD and online...

TO GET STARTED

Course Scheduling www1.marin.edu/schedule

Enrollment Services, Financial Aid and Registration es.marin.edu

High School student programs and enrollment information www1.marin.edu/high-school-programs

PROGRAM CONTACT

Manny Kang
MaKang@marin.edu
(415) 457-8811 x8200

PROGRAM ONLINE

academics.marin.edu/program/mach

COUNSELING

(415) 485-9432
ss.marin.edu/counseling

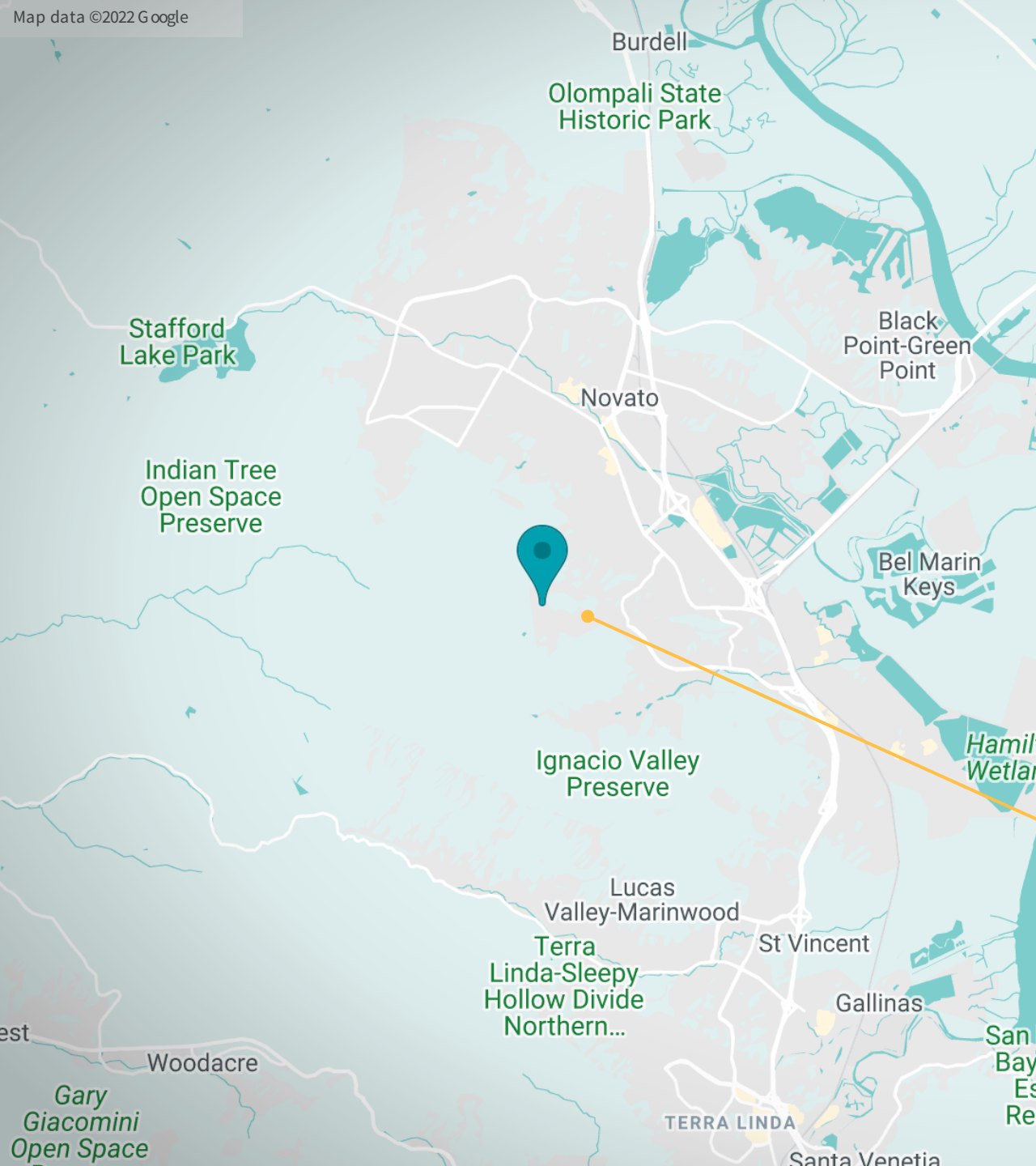
- 1 page
- Careers
- Offerings
- Core Classes
- Resources to get started
- Contact info.
- Program landing page

Summary/Wrap-up

Thoughts? **Questions?**

NEXT STEPS





Thank You!

1800 Ignacio Boulevard Novato, CA 94949

- @ Alina R Varona <arvarona@marin.edu>
- @ Heather J Rahman <hrahman@marin.edu>
- @ Lance G Barthelemy <lbarthelemy@marin.edu>
- @ Dr. Manjit Kang <makang@marin.edu>

College of Marin, Indian Valley Campus