

District Technical Review Committee Meeting Minutes

Tuesday, May 17, 2022	2:30-4:00pm
Committee Members	Guests
☐ Steven Schmidt (Chair, MUS)	☐ Lijuan Zhai (AVC Ed Services and
	Institutional Effectiveness, RCCD)
☐ Jeannie Kim (Co-Chair, VC Ed. Service	ees) 🗆 Bryan Medina (Staff, RCCD)
☐ Kelly Douglass (ENG, RCC)	☐ Ellen Brown-Drinkwater (AO, RCC)
☐ Brian Johnson (MAT, NOR)	☐ Nick Franco (AO, NOR)
☐ Ann Pfeifle (HIS, MVC)	☐ Jeanne Howard (AO, MVC)
	☐ Sabina Fernandez (Staff, MVC)
	☐ Casandra Greene (Staff, RCC)
	☐ Nicole Brown (Staff, NOR)
Additional Guests:	

Zoom Information

 $\underline{https://rccd-edu.zoom.us/j/95959517466?pwd=dzlwRnBUTEJ4RStNeFhDSVUwd0M3QT09}$

Meeting ID: 959 5951 7466; Passcode: 961648

+1 669 900 6833

Agenda and Minutes

- 1. Approval of Agenda
- 2. Approval of Minutes May 3, 2022

Action Items

1. Curriculum Proposals

Discussion Items

1. Course Materials Fees – Kelly Douglass

Program Documentation

- 1. New Programs
 - a. Norco Data Analytics
 - b. Norco Data Science
- 2. Program Modifications
 - a. Riverside Sociology
 - b. Moreno Valley Spanish
 - c. Riverside Graphic Design and Digital Media

Technical Review - Curriculum Proposals Proposals for 05/17/2022

C	ourses			
C	ourse Exclusio	ons	MNR	Notes
	SPA 3N	Spanish for Spanish Speakers		
C	ourse Inclusio	ons en	MNR	Notes
	ENG 885	Writing Clinic		
	KIN A89A	Beginning Body Sculpting		
	KIN A89B	Intermediate Body Sculpting		
	KIN A89C	Advanced Body Sculpting		
C	ourse Maior I	Modifications	MNR	Notes
_	EAR 25	Teaching in a Diverse Society		
Н	ETS 2	Introduction to Chicanx and Latinx Studies		_
	Held to await cros	slisted HIS 31 (now HIS 61).		
Н	HMS 50	Introduction to African American Families and Populations		
	Held for crossliste	d ETS partner.		
Н	HMS 51	Introduction to Latina and Latino American Families and Populations		
	Held for crossliste	d ETS partner.		
Н	HMS 52	Introduction to Asian American Families and Populations		
	Held for crossliste	d ETS partner.		
Н	HMS 53	Introduction to Native American Families and Populations		
	Held for crossliste			
	MAT 112	Corequisite Support for Math 12		
	MAT 12	Statistics		
	MAT 12H	Honors Statistics		
н	RLE 81	Real Estate Practices		
	For RLE courses, v	arious revisions to content needed.		
Н	RLE 82	Legal Aspects of Real Estate	V V	
Н	RLE 83	Real Estate Finance		
Н	RLE 84	Real Estate Appraisal	V V	

C	ourses			
C	ourse Major I	<u>Modifications</u>	MNR	Notes
Н	RLE 85	Real Estate Economics	V V	
Н	RLE 86	Escrow Procedures I	V V	
C	ourse Minor	Modifications	MNR	Notes
	KIN 26	Foundations of Coaching		
Н	PDS 808 Holding for CAT cr	Critical Thinking, Problem Solving and Decision Making rosslisting.	V V	
Н	PDS 810 Holding for CAT cr	Time Management rosslisting.	V V	
Н	PDS 811 Holding for CAT cr	High Impact Presentations and Proposals for the Work Place cosslisting.		
Н	PDS 812 Holding for CAT cr	Workplace Communication Strategies	V V	
	WEL 115A	SMAW/GMAW Pipe welding fundamentals		
	WEL 20	Blueprint Reading for Welders		
	WEL 22	Plate and Structural Layout		
	WEL 24	Pipe Fitting for the trades.		
	WEL 26	Pipe Layout		
	WEL 65A	Beginning Shielded Metal Arc Welding		
	WEL 65B	Advanced Shielded Metal Arc Welding		
	WEL 75A	Gas Metal Arc Welding		
	WEL 75B	Flux Cored Arc Welding (FCAW)		
	WEL 85A	American Welding Society/Los Angeles City Welding I		
	WEL 85B	American Welding Society/Los Angeles City Welding II		
	WEL 95A	Introduction to Gas Tungsten Arc Welding		
	WEL 95B	Advanced Gas Tungsten Arc Welding (GTAW)		
D	istance Educa	ation	MNR	Notes
	EST 10DE	Industrial Calculation d further development.		
Н	EST 30DE	Architectural Blueprint Reading		

Courses			
Distance Educ	ation_	MNR	Notes
H EST 32DE	Architectural Practice 1		
H EST 33DE	Materials of Construction		
	Honors Physical Geography e members need to be included for any Honors DE proposa m with honors council that the DE proposal is appropriate.	✓ ✓ ✓ als.	
Extensive Labs	<u>5</u>	MNR	Notes
GEG 30A	Field Studies in Geography	V V	
GEG 30B	Field Studies in Geography	V V	
GEG 30C	Field Studies in Geography	V V	
GEG 30D	Field Studies in Geography		
New Courses H EMS 56 Short description enrollment needs	Advanced Emergency Medical Technician does not match description. There may be a limitation on	M N R	Notes
H EMS 57	Advanced Emergency Medical Technician (clinical) ollment may be needed. APP is listed as cross discipline.	V	
	Dynamics If fixes needed. No entrance skills. Course content may be lighted as a need to be changed.	☐ 🗸 🗌 ght.	
_	Strength of Materials g fixes needed. No entrance skills. Course content may be lightly need to be changed.	ght.	
General Edu	cation		
General Educa	tion Modifications	M N R	Notes
H MUS 98 Holding for further	Careers and Entrepreneurship in Music and the Arts er discussion. Course is also being re-evaluated at the state	✓ ✓ ✓ level.	
Programs			
New Programs Certificate H CIS	Data Analytics	MNR	Notes
	nal consortium, advisory recommendation, and LMI.		

Programs					
New Progra	<u>ams</u>	MNR	Notes		
Degree					
Holding for re	Data Science egional consortium, advisory recommendation, and LMI.				
Program M	Program Modifications M N R Notes				
SOC	Sociology				
SPA	Spanish	V			
Certificate					
H HMS	Careers in Social Work				
H HMS	Social Work Administration Studies	V			
Degree & Cert	ificate				
ADM	Graphic Design and Digital Media				

Technical Review Committee

Proposals for Review for Meeting: 05/17/2022

Courses				
Course Excl	<u>lusions</u>	MNR	Discussion	Action
SPA 3N Rationale:	Spanish for Spanish Speakers Due to consecutive low enrollment in the past three years this course he canceled several times. After thorough consideration and discussion will Language Department (District wide), we decided that a course exclusion at this time.	th World		
Course Incl	<u>usions</u>	MNR	Discussion	Action
ENG 885 Rationale:	Writing Clinic We offered the class once or twice in the past, but it was unsuccessful, because we did not have a fully functioning Writing and Reading Cente to host it, so we excluded it. Now that we have a functioning WRC and Instructor who can spend the time that is needed to develop individual modules for students who enroll, we have the opportunity to offer the the many students who need help with writing skills, especially student struggle with basic skills or have language or disability barriers. Eng 885 another open door, another equity-minded resource, for these student student who needs foundational help with writing in any discipline.	r in which a Lead ized course to s who		
KIN A89A Rationale:	Beginning Body Sculpting To expand our Norco College Kinesiology activity course offerings in ord provide more options for students.	☐ ☑ ☐		
KIN A89B Rationale:	Intermediate Body Sculpting To expand our Norco College Kinesiology activity course offerings in ord provide more options for students.	☐ ☑ ☐		
KIN A89C Rationale:	Advanced Body Sculpting To expand our Norco College Kinesiology activity course offerings in order provide more options for students	□ 🗹 🗆 der to		

Courses **Course Major Modifications** MNR Discussion Action **EAR 25 Teaching in a Diverse Society V V** Rationale: This course is one of the California Alignment Project Required 8 courses and needs modifying to bring it into alignment with the most current version, which is also aligned to the newly created Commission for Teacher Credentialing, Teacher Performance Expectations (TPEs). Also updated with new language around equity and diversity. ETS 2 Introduction to Chicanx and Latinx Studies Held to await crosslisted HIS 31 (now HIS 61). Rationale: Per AB1460, this Ethnic Studies course is designed to fulfill the CSU Area F GE Breadth graduation requirement. **Introduction to African American Families and Populations** Held for crosslisted ETS partner. **HMS 50** Rationale: Revised the five SLOs as provided by the California State University Council on Ethnic Studies Core Competencies for Ethnic Studies System-wide Graduation Requirement, updated course content Held for crosslisted ETS partner. **HMS 51** Introduction to Latina and Latino American Families and **Populations** Rationale: Revised the five SLOs as provided by the California State University Council on Ethnic Studies Core Competencies for Ethnic Studies System-wide Graduation Requirement, updated course content **HMS 52 Introduction to Asian American Families and Populations** Held for crosslisted ETS partner. Rationale: Revised the five SLOs as provided by the California State University Council on Ethnic Studies Core Competencies for Ethnic Studies System-wide Graduation Requirement, updated course content **HMS 53 Introduction to Native American Families and Populations** Held for crosslisted ETS partner. Rationale: Revised the five SLOs as provided by the California State University Council on Ethnic Studies Core Competencies for Ethnic Studies System-wide Graduation Requirement, updated course content **MAT 112 Corequisite Support for Math 12** Rationale: Need to adjust the prerequisite language and update textbooks. **MAT 12 Statistics** Rationale: Need to adjust the prerequisite since Math 35 will no longer be offered. Also, we need to update textbooks.

C	Juises				
<u>C</u>	ourse Maj	or Modifications	MNR	Discussion	Action
	MAT 12H Rationale:	Honors Statistics Need to adjust the prerequisite since Math 35 will no longer be offered. need to update textbooks.	Also, we		
Н	RLE 81 Rationale:	Real Estate Practices This course is being updated as a major modification to include current a relevant SLOs, detailed course content, detailed assignments and update textbook information.		For RLE courses, various revisions to content needed.	
Н	RLE 82 Rationale:	Legal Aspects of Real Estate This course is being updated as a major modification to include current a relevant SLOs, detailed course content, detailed assignments and update textbook information.			
Н	RLE 83 Rationale:	Real Estate Finance This course is being updated as a major modification to include current a relevant SLOs, detailed course content, detailed assignments and update textbook information.			
н	RLE 84 Rationale:	Real Estate Appraisal This course is being updated as a major modification to include current a relevant SLOs, detailed course content, detailed assignments and update textbook information.			
Н	RLE 85 Rationale:	Real Estate Economics This course is being updated as a major modification to include current a relevant SLOs, detailed course content, detailed assignments and update textbook information.			
Н	RLE 86 Rationale:	Escrow Procedures I This course is being updated as a major modification to include current a relevant SLOs, detailed course content, detailed assignments and update textbook information.			
<u>C</u>	ourse Min	or Modifications	MNR	Discussion	Action
	KIN 26 Rationale:	Foundations of Coaching Update course materials.			

Courses Course Minor Modifications Action MNR Discussion **PDS 808** Critical Thinking, Problem Solving and Decision Making Holding for CAT crosslisting. Rationale: Two year CTE review. No changes needed. Holding for CAT crosslisting. **PDS 810 Time Management** Rationale: Two year CTE review. No changes needed. High Impact Presentations and Proposals for the Work Place Holding for CAT crosslisting. PDS 811 Rationale: Two year CTE review. No changes needed. **V V** PDS 812 **Workplace Communication Strategies** Holding for CAT crosslisting. Rationale: Two year CTE review. No changes needed. **WEL 115A** SMAW/GMAW Pipe welding fundamentals Rationale: Course review to meet the obligations of the CTE 2-year cycle for the state. The course is up to date with current industry standards. No changes are necessary. WEL 20 **Blueprint Reading for Welders** Course review to meet the obligations of the CTE 2-year cycle for the state. The Rationale: course is up to date with current industry standards. WEL 22 **Plate and Structural Layout** Rationale: Course review to meet the obligations of the CTE 2-year cycle for the state. The course is up to date with current industry standards. **WEL 24** Pipe Fitting for the trades. Course review to meet the obligations of the CTE 2-year cycle for the state. The Rationale: course is up to date with current industry standards. No changes are necessary. **WEL 26** Pipe Layout Rationale: Course review to meet the obligations of the CTE 2-year cycle for the state. The course is up to date with current industry standards. No changes are necessary. **WEL 65A Beginning Shielded Metal Arc Welding** Course review to meet the obligations of the CTE 2-year cycle for the state. The Rationale: course is up to date with current industry standards. No changes are necessary. WEL 65B **Advanced Shielded Metal Arc Welding** Course review to meet the obligations of the CTE 2-year cycle for the state. The Rationale:

course is up to date with current industry standards. No changes are necessary.

C	ourses				
<u>C</u>	ourse Mind	or Modifications	MNR	Discussion	Action
	WEL 75A Rationale:	Gas Metal Arc Welding Course review to meet the obligations of the CTE 2-year cycle for the course is up to date with current industry standards. No changes are			
	WEL 75B Rationale:	Flux Cored Arc Welding (FCAW) Course review to meet the obligations of the CTE 2-year cycle for the course is up to date with current industry standards. No changes are			
	WEL 85A Rationale:	American Welding Society/Los Angeles City Welding I Course review to meet the obligations of the CTE 2-year cycle for the course is up to date with current industry standards. No changes are			
	WEL 85B Rationale:	American Welding Society/Los Angeles City Welding II Course review to meet the obligations of the CTE 2-year cycle for the course is up to date with current industry standards. No changes are			
	WEL 95A Rationale:	Introduction to Gas Tungsten Arc Welding Course review to meet the obligations of the CTE 2-year cycle for the course is up to date with current industry standards. No changes are			
	WEL 95B Rationale:	Advanced Gas Tungsten Arc Welding (GTAW) Course review to meet the obligations of the CTE 2-year cycle for the course is up to date with current industry standards. No changes are			
D	istance Ed	<u>ucation</u>	MNR	Discussion	Action
Н	EST 10DE Rationale:	Industrial Calculation		EST proposals need further development.	
Н	EST 30DE Rationale:	Architectural Blueprint Reading			
Н	EST 32DE Rationale:	Architectural Practice 1			
н	EST 33DE	Materials of Construction			

Courses Distance Education MNR Discussion Action **Honors Physical Geography V V** Honors committee members need to be included **GEG 1HDE** for any Honors DE proposals. Holding to confirm Rationale: with honors council that the DE proposal is appropriate. **Extensive Labs** MNR Discussion Action GEG 30A Field Studies in Geography **V V** Rationale: GEG-30A,B,C & D should be a lab paid at lecture rate to properly compensate faculty for the actual amount of work required in prepping the lab activities and field excursions for each course meeting, preparing students to work their way through each activity, supervising and teaching them as they do the work, and then grading everything. This course can cover topics and labs from the natural sciences and the social sciences, and as such the lab activities and instruments are not simple exercises that students can easily navigate on their own. GEG 30B Field Studies in Geography Rationale: GEG-30A,B,C & D should be a lab paid at lecture rate to properly compensate faculty for the actual amount of work required in prepping the lab activities and field excursions for each course meeting, preparing students to work their way through each activity, supervising and teaching them as they do the work, and then grading everything. This course can cover topics and labs from the natural sciences and the social sciences, and as such the lab activities and instruments are not simple exercises that students can easily navigate on their own. **GEG 30C V V V** Field Studies in Geography Rationale: GEG-30A,B,C & D should be a lab paid at lecture rate to properly compensate faculty for the actual amount of work required in prepping the lab activities and field excursions for each course meeting, preparing students to work their way through each activity, supervising and teaching them as they do the work, and

not simple exercises that students can easily navigate on their own.

then grading everything. This course can cover topics and labs from the natural sciences and the social sciences, and as such the lab activities and instruments are

C	Courses					
<u>E</u>	xtensive La	<u>bs</u>	MNR	Discussion	Action	
	GEG 30D Rationale:	Field Studies in Geography GEG-30A,B,C & D should be a lab paid at lecture rate to properly compens faculty for the actual amount of work required in prepping the lab activitie field excursions for each course meeting, preparing students to work their through each activity, supervising and teaching them as they do the work, then grading everything. This course can cover topics and labs from the na sciences and the social sciences, and as such the lab activities and instrumnot simple exercises that students can easily navigate on their own.	es and way and atural			
N	New Courses M N R Discussion Action					
Н	EMS 56 Rationale:	Advanced Emergency Medical Technician There are 4 different levels of training for EMS and this course will comple offerings of all four courses. The partners that we serve are requesting the training for their fire personnel and this course would fill that gap.		Short description does not match description. There may be a limitation on enrollment needed.		
н	EMS 57 Rationale:	Advanced Emergency Medical Technician (clinical) The course is being designed to meet the needs of our tribal partners that training their EMTs to the Advanced EMT level. This course is supported by Riverside County EMS Agency and the government agency approved the coff this course.	у	Limitation on enrollment may be needed. APP is listed as cross discipline.		
Н	ENE 35B Rationale:	Dynamics The course is needed to support transfer student needs for multiple engin majors. The course is an extension of ENE 35 statics which Norco College of offers.	_	Some fortmatting fixes needed. No entrance skills. Course content may be light. Course number may need to be changed.		
н	ENE 35C Rationale:	Strength of Materials The course is needed to support engineering transfer students prepare an transfer requirements.	☐ ✓ ☐ d satisfy	Some fortmatting fixes needed. No entrance skills. Course content may be light. Course number may need to be changed.		

General Education General Education Modifications MNR Discussion Action Careers and Entrepreneurship in Music and the Arts **V V** Holding for further discussion. Course is also being **MUS 98** re-evaluated at the state level. Rationale: Proposal to include MUS 98 Careers in Music in RCCD GE Area E 2 **Programs New Programs** MNR Discussion Action Certificate **Data Analytics** Holding for regional consortium, advisory recommendation, and LMI. Rationale: This program addresses industry's continuing demands for professionals to test and build tools to meet the data quality validation needs for a cloud platformbased application and building enterprise analytics of large data volume. Based on Inland Empire/Desert region Labor Market Information report, the data-analysis occupation is projected to have 189 annual job openings, increasing employment by 8% through 2024. The 10th percentile hourly wage for data analysis related occupations exceeds the Family Needs Calculator self-sustainability rate, indicating that approximately the top 90% of workers in this occupation earn selfsufficient hourly wages. The courses in this program will also align with university courses, which will permit students to transfer to further develop skills and knowledge in the areas of Data Science. Documents: **Narrative** LMI **Advisory Committee Regional Consortium** Degree Holding for regional consortium, advisory **Data Science** recommendation, and LMI. Rationale: This program addresses industry's continuing demands for professionals to test and build tools to meet the data quality validation needs for a cloud platformbased application and building enterprise analytics of large data volume. Based on Inland Empire/Desert region Labor Market Information report, the data-analysis occupation is projected to have 189 annual job openings, increasing employment by 8% through 2024. The 10th percentile hourly wage for data analysis related occupations exceeds the Family Needs Calculator self-sustainability rate, indicating that approximately the top 90% of workers in this occupation earn selfsufficient hourly wages. The courses in this program will also align with university courses, which will permit students to transfer to further develop skills and knowledge in the areas of Data Science. Documents: **Narrative** LMI **Advisory Committee** Regional Consortium

Programs				
Program N	lodifications	MNR	Discussion	Action
ADT				
SOC Rationale:	Sociology Update ADT in SOC based on new updates to TMC.			
SPA Rationale:	Spanish Program modification due to removing SPA 3N course, which is not the catalog.	☑ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐		
Certificate				
H HMS Rationale:	Careers in Social Work			
H Rationale:	Social Work Administration Studies	V		
Degree & Cer	tificate			
ADM Rationale:	Graphic Design and Digital Media Three foundation courses need to be added to required course lis emphasis areas of this certificate/degree. This includes ADM 2A, 2 Adding the required foundation courses aligns with program outcimprove student skill competencies. These courses are currently of ADM AOE certificates and will give students additional credit toward Degree. This completes the ADM alignment strategy giving student pathways to program completion.	2B and 55. comes and will offered on other ard an Associates		



Program Outline					
Norco College are college specific. If multiple colle e specific supporting documents ar					
	CIP Code: 11.0501				
☐ Associate's Degree only	☐ Certificate <u>and</u> Degree				
☐ Associate of Arts	☐ Associate of Science				
	existing certificate/degree existing local certificate				
g certificate/degree, please spe to title, description, learning outcom					
, increasing employment by 8% thr s exceeds the Family Needs Calculo in this occupation earn self-suffici					
	ege coordinator and the District of submit your proposal until all of				
1					
vai					
	Norco College are college specific. If multiple college specific supporting documents are □ Associate's Degree only □ Associate of Arts are □ Modification to an ante □ Modification to an are certificate/degree, please specific title, description, learning outcome in a degree application and building agion Labor Market Information representation and processing employment by 8% that are exceeds the Family Needs Calculation this occupation earn self-sufficients, which will permit students to the exception of				

Degrees and Certificates of 8 Units or More with Vocational TOPs Codes

☑ Transfer preparation documentation (only if applicable)

In addition to the above, all degrees and certificates of 8 units or more with a vocational TOPs code must include the following to be submitted to the State Chancellor's Office for approval.*

☐ Labor Market Information and Analysis (required for new programs and modifications; also be recent within 2 years).-

Advisory Committee Recommendation (Required for new programs and may be required for modifications. Check with the curriculum coordinator at your college to determine if a new recommendation is necessary.)

☑ Regional Consortium Recommendation (required for new programs only)



*While certificates between 8 and less than 16 units can be approved locally and are not required to be submitted to the State Chancellor's Office for approval, certificates that have not been approved by the State Chancellor's Office cannot appear on student transcripts and the college cannot receive apportionment for program completions.

Additionally, any certificate of less than 8 units can only be approved locally. These certificates also cannot appear on student transcripts and colleges cannot receive apportionment for completion.

Program Narrative

Item 1. Program Goals and Objectives

Data Analytics Certificate of Achievement provides students with a foundation in data analysis, in which students will model, synthesize, and present large data sets for business decision making. Courses will focus on the techniques and tools to extract data from various data sources, model, integrate data, and visualize data for organizational decision making and intelligence gathering. The program prepares students for entry-level jobs, or to help them advance into careers, such as Operation Data Analyst, Business Analytics Specialist, System Data Analyst, Data Visualization Developer, Test Data Analyst, and Market Research Analyst. Topics covered will include statistics, research methods, SQL queries, systems analysis, design, and applied predictive analytics.

Program Learning Outcomes:

Upon successful completion of this program, students should be able to:

- Identify, extract, clean and maintain data in databases.
- Interpret and evaluate data trends or patterns in complex data sets using statistical techniques, analytic methods, and tools.
- Create and monitor reports to preserve data quality, identify critical issues, trends, and potential solutions.

Item 2. Catalog Description

Data Analytics Certificate of Achievement provides students with a foundation in data analysis, in which students will model, synthesize, and present large data sets for business decision making. Courses will focus on the techniques and tools to extract data from various data sources, model, integrate data, and visualize data for organizational decision making and intelligence gathering. The program prepares students for entry-level jobs, or to help them advance into careers, such as Operation Data Analyst, Business Analytics Specialist, System Data Analyst, Data Visualization Developer, Test Data Analyst, and Market Research Analyst. Topics covered will include statistics, research methods, SQL queries, systems analysis, design, and applied predictive analytics.

Program Requirement:

Before entering this program, students must complete MAT-35 and MAT-10 or MAT-23 or qualifying placement level in mathematics to be successful in courses in the program.

Program Learning Outcomes:

Upon successful completion of this program, students should be able to:

- Identify, extract, clean and maintain data in databases.
- Interpret and evaluate data trends or patterns in complex data sets using statistical techniques, analytic methods, and tools.
- Create and monitor reports to preserve data quality, identify critical issues, trends, and potential solutions.

Required Courses: 30 units

Course	Title	Units	Sequencing
CIS-1A	Introduction to Computer Information Systems	3	Semester 1
MAT- 70A/CIS-70A	Foundations of Data Science	3	Semester 1
CIS/CSC-61	Introduction to Database Theory	3	Semester 1
CIS-30A	Introduction to Python Programming	3	Semester 1



or	or		
CSC-8	Programming Concepts: Python		
MAT-70B	Statistics for STEM	4	Semester 2
MAT-1A	Calculus I	4	Semester 2
CIS/CSC-63	Introduction to Structured Query Language (SQL)	3	Semester 2
MAT-1B	Calculus II	4	Semester 3
CIS-30E	Advanced Python Programming	3	Semester 3

Elective Courses: 3 units

Course	Title	Units	Sequencing
CIS-68A or	Introduction to Machine Learning	3	Semester 3
CIS-68B or	Big Data Fundamentals	3	Semester 3
CIS/CSC-2 or	Fundamental of Systems Analysis	3	Semester 3
CIS/CSC-20	Systems Analysis and Design	3	Semester 3

Total Program Units: 33 units

Item 3. Program Requirements

Required Courses: 30 units

Course	Title	Units	Sequencing
CIS-1A	Introduction to Computer Information Systems	3	Semester 1
MAT- 70A/CIS-70A	Foundations of Data Science	3	Semester 1
CIS/CSC-61	Introduction to Database Theory	3	Semester 1
CIS-30A or CSC-8	Introduction to Python Programming or Programming Concepts: Python	3	Semester 1
MAT-70B	Statistics for STEM	4	Semester 2
MAT-1A or MAT-1AH	Calculus I / Honors Calculus I	4	Semester 2
CIS/CSC-63	Introduction to Structured Query Language	3	Semester 2
MAT-1B	Calculus II	4	Semester 3
CIS-30E	Advanced Python Programming	3	Semester 3

Elective Courses: 3 units

Course	Title	Units	Sequencing
CIS-68A or	Introduction to Machine Learning	3	Semester 3
CIS-68B or	Big Data Fundamentals	3	Semester 3
CIS/CSC-2 or	Fundamental of System Analysis	3	Semester 3
CIS/CSC-20	Systems Analysis and Design	3	Semester 3

Total Program Units: 33 units



Item 4. Master Planning

This cross-discipline certificate will increase the diversity in Inland Empire workforce by providing technical training emphasis in Career Technical Education. This program will increase the diversity of student population in STEM, Computer Information Systems and Mathematics, aligning with Guided Pathway to support student success. The growth of the program will also address to need to improve special populations in STEM, such as potentially increasing the population of female students and professionals in the areas of STEM. The program is expected to have a steady growth after the initial year with program promotional outreach to local high schools and community centers.

Item 5. Enrollment and Completer Projections

Enrollment Projects for courses are as followed:

Required courses:

• CIS-1A: 49 students

• MAT-27B: 49 students

• CIS/CSC-61: 49 students

• CIS-30A or CSC-8: 49 students

• CIS-68A/MAT27A: 49 students

• CIS-68B: 49 students

Electives:

• CIS-68C: 49 students

• CIS-2: 49 students

• CIS-20: 49 students

This program is expected to have 50 to 100 students by Spring 2023.

Item 6. Place of Program in Curriculum/Similar Programs

Most of the courses in the program are active courses that are currently offered at all three campuses in RCCD. The new courses will be incorporated into the program seamlessly. No other programs are similar or the same as the proposed Data Analytics program.

Item 7. Similar Programs at Other Colleges in Service Area

No other college in the region offers similar program. This program offers opportunities for students to acquire technical training that will help them build careers and contribute to Inland Empire social-economic improvement. It also provides local organizations access to a growing workforce and training resources for their incumbent workers.

Item 8. Transfer Preparation Information (if applicable)

Existing courses have been articulated for UC and CSU transfer. New courses can be articulated as transferrable courses at University of California Riverside, California State University San Bernardino, Cal-Poly Pomona, and other institutions. The courses in this certificate can be used toward Associate Degree to Transfer for Data Science for UC and CSU.



Program Outline

Title: Data S	cience		
Originator:	Caroline Hutchings	I	Date 3/9/2022
Department: S	School of Science, Tec	hnology, Engineering, and	Mathematics
	l degrees and certificates	■ Norco College are college specific. If multiple the specific supporting documents	colleges wish to adopt this degree or
TOPs Code:	0707.30 CIP	Code: 11.0501	
Type of Progr	am:		
☐ Certificate o	of Achievement only	☐ Locally approved certification	ficate (8-units or less) only
⊠ Associate D	Degree only	☐ Certificate of Achiever	ment and Degree
Type of Assoc	iate Degree:	☐ Associate of Arts	
This is a:	⊠ New certificate/de	gree	o an existing certificate/degree
			specify the changes being made: utcomes, courses, unit values, etc.)

Rationale:

This program addresses industry's continuing demands for professionals to test and build tools to meet the data quality validation needs for a cloud platform-based application and building enterprise analytics of large data volume. Based on Inland Empire/Desert region Labor Market Information report, the data-analysis occupation is projected to have 189 annual job openings, increasing employment by 8% through 2024. The 10th percentile hourly wage for data analysis related occupations exceeds the Family Needs Calculator self-sustainability rate, indicating that approximately the top 90% of workers in this occupation earn self-sufficient hourly wages. The courses in this program will also align with university courses, which will permit students to transfer to further develop skills and knowledge in the areas of Data Science.

Required Documentation

Please submit this form and the documents outlined below to your college coordinator and the District Technical Review committee via TechReview@rccd.edu. Please do not submit your proposal until all of the documentation below is complete.

All Degrees and Certificates

- ☑ Evidence of district-wide discipline communication
- ☑ Department minutes showing approval
- Narrative (see following page)
- ☑ Transfer preparation documentation (only if applicable)

Degrees and Certificates of 8 Units or More with Vocational TOPs Codes

In addition to the above, all degrees and certificates of 8 units or more with a vocational TOPs code must include the following to be submitted to the State Chancellor's Office for approval.*



☑ Labor Market Information and Analysis (Required for new programs and modifications.)

Advisory Committee Recommendation (Required for new programs and may be required for modifications. Check with the curriculum coordinator at your college to determine if a new recommendation is necessary.)

☑ Regional Consortium Recommendation (Required for new programs only.)

*Certificates between 8 and less than 16 units can be approved locally or can be submitted to the State Chancellor's Office for approval. Certificates of less than 8 units can only be approved locally. However, locally approved certificates will not appear on student transcripts.

Program Narrative

Item 1. Program Goals and Objectives

Associate Degree of Science in Data Science provides students with a foundation in data analysis, in which students will model, synthesize, and present large data sets for business decision making. Courses will focus on the techniques and tools to extract data from various data sources, model, integrate data, and visualize data for organizational decision making and intelligence gathering. The program prepares students for entry-level jobs, or to help them advance into careers, such as Operation Data Analyst, Business Analytics Specialist, System Data Analyst, Data Visualization Developer, Test Data Analyst, and Market Research Analyst. Topics covered will include statistics, research methods, SQL queries, systems analysis, design, and applied predictive analytics.

Program Learning Outcomes:

Upon successful completion of this program, students should be able to:

- Identify, extract, clean and maintain data in databases.
- Interpret and evaluate data trends or patterns in complex data sets using statistical techniques, analytic methods, and tools.
- Create and monitor reports to preserve data quality, identify critical issues, trends, and potential solutions.

Item 2. Catalog Description

Associate Degree of Science in Data Science provides students with a foundation in data analysis, in which students will model, synthesize, and present large data sets for business decision making. Courses will focus on the techniques and tools to extract data from various data sources, model, integrate data, and visualize data for organizational decision making and intelligence gathering. The program prepares students for entry-level jobs, or to help them advance into careers, such as Operation Data Analyst, Business Analytics Specialist, System Data Analyst, Data Visualization Developer, Test Data Analyst, and Market Research Analyst. Topics covered will include statistics, research methods, SQL queries, systems analysis, design, and applied predictive analytics.

Program Requirement:

Before entering this program, student must complete MAT - 35 and MAT-10 or MAT-23 or qualifying placement level in mathematics to be successful in courses in the program.

Program Learning Outcomes:

Upon successful completion of this program, students should be able to:

• Identify, extract, clean and maintain data in databases.

- Interpret and evaluate data trends or patterns in complex data sets using statistical techniques, analytic methods, and tools.
- Create and monitor reports to preserve data quality, identify critical issues, trends, and potential solutions.

Required Courses: 37 units

Course	Title	Units	Sequencing
CIS-1A	Introduction to Computer Information Systems	3	Semester 1
MAT- 70A/CIS-70A	Foundations of Data Science	3	Semester 1
CIS/CSC-61	Introduction to Database Theory	3	Semester 1
CIS-30A or CSC-8	Introduction to Python Programming or Programming Concepts: Python	3	Semester 1
MAT-70B	Statistics for STEM	4	Semester 2
MAT-1A or MAT-1AH	Calculus I / Honors Calculus I	4	Semester 2
CIS/CSC-63	Introduction to Structured Query Language (SQL)	3	Semester 2
MAT-1B	Calculus II	4	Semester 3
CIS-30E	Advanced Python Programming	3	Semester 3
MAT-1C	Calculus III	4	Semester 4
MAT-3	Linear Algebra	3	Semester 4

Elective Courses: 3 units

Course	Title	Units	Sequencing
CIS-68A or	Introduction to Machine Learning	3	Semester 3
CIS-68B or	Big Data Fundamentals	3	Semester 3
CIS/CSC-2 or	Fundamentals of Systems Analysis	3	Semester 4
CSC-20	System Analysis and Design	3	Semester 4

Total Program Units: 40 units

Item 3. Program Requirements

Required Courses: 37 units

Course	Title	Units	Sequencing	
CIS-1A	Introduction to Computer Information Systems	3	Semester 1	
MAT- 70A/CIS-70A	Foundations of Data Science	3	Semester 1	
CIS/CSC-61	Introduction to Database Theory	3	Semester 1	
CIS-30A or CSC-8	Introduction to Python Programming or Programming Concepts: Python	3	Semester 1	
MAT-70B	Statistics for STEM	4	Semester 2	
MAT-1A	Calculus I	4	Semester 2	
CIS/CSC-63	Introduction to Structured Query	3	Semester 2	



	Language (SQL)		
MAT-1B	Calculus II	4	Semester 3
CIS-30E	Advanced Python Programming	3	Semester 3
MAT-1C	Calculus III	4	Semester 4
MAT-3	Linear Algebra	3	Semester 4

Elective Courses: 3 units

Course	Title	Units	Sequencing
CIS-68A or	Introduction to Machine Learning	3	Semester 3
CIS-68B or	Big Data Fundamentals	3	Semester 3
CIS/CSC-2 or	Fundamentals of Systems Analysis	3	Semester 4
CSC-20	System Analysis and Design	3	Semester 4

Total Program Units: 40 units

The **Associate of Science Degree in Data Science** will be awarded upon completion of the degree requirements, including general education and other graduation requirements as described in the college catalog.

Minimum Degree Units		Maximum Degree Units		
Minimum Required Units	40	Maximum Required Units	40	
Minimum Elective Units	3	Maximum Elective Units	3	
Local GE Required Units	27	CSUGE Required Units	39	
Double Counted Units	7	Double Counted Units	3	
Total Minimum Degree Units	60	Total Maximum Degree Units	76	

Item 4. Master Planning

This degree will increase the diversity in Inland Empire workforce by providing technical training emphasis in Career Technical Education. This program will increase the diversity of student population in STEM, Computer Information Systems and Mathematics. It will allow student to transfer to UC or CSU to pursue a bachelor's degree in Data Science or related areas. The program will also improve the growth in special populations in STEM education, such as potentially increasing the population of female students and under-represented populations in the areas of STEM. The program is expected to have a steady growth after the initial year with program promotional outreach to local high schools and community centers.

Item 5. Enrollment and Completer Projections

Enrollment Projects for courses are as followed:

Required courses:

• CIS-1A: 49 students

MAT-70A/CIS-70A: 49 students

MAT-70B: 49 studentsCIS/CSC-61: 49 studentsCIS/CSC-63: 49 students



• CIS-30A or CSC-8: 49 students

• CIS-68B: 49 students

Electives:

CIS-68A: 49 studentsCIS-68B: 49 studentsCIS-2: 49 students

• CIS-20: 49 students

This program is expected to have 50 to 100 students by Fall 2023.

Item 6. Place of Program in Curriculum/Similar Programs

Most of the courses in the program are active courses that are currently offered at all three campuses in RCCD. The new courses will be incorporated into the program seamlessly. No other programs are similar or the same as the proposed Data Analytics program.

Item 7. Similar Programs at Other Colleges in Service Area

No other college in the region offers similar program. This program offers opportunities for students to acquire technical training that will help them build careers and contribute to Inland Empire social-economic improvement. It also provides local organizations access to a growing workforce and training resources for their incumbent workers.

Item 8. Transfer Preparation Information (if applicable)

Existing courses have been articulated for UC and CSU transfer. New courses can be articulated as transferrable courses at University of California Riverside, California State University San Bernardino, Cal-Poly Pomona and other institutions. The courses in this certificate can be used toward Associate Degree to Transfer for Data Science for UC and CSU.



Program Outline of Record – Associate Degree for Transfer (ADT)

Program Outline

Title: Ass	sociate Degre	e for Transfer in Soc	iology				
(Please not	e: ADTs are colle	Talley College ge specific. If multiple collocuments are required.)		_		ide City College parate proposal and	
TOPs Co	de:	CIP Code:					
Type of A	ADT:	Associate in Arts for	r Transfer		☐ Associa	ate in Science fo	r
This is a:		New ADT		⊠ Mod	dification to	o an existing AD	T
Update AD Rational	T in SOC based of	n to an existing ADT, on new updates to TMC.	please specify	the cl	hanges bei	ng made:	
District T	echnical Revie	Required and the documents out the committee via Technology documentation below	hReview@rccd	your o	_		
☐ Discipi ☐ Narrati ☐ Compl ☐ C-ID o	line and Departive (See next page eted Chancello	or's Office Template (iculation Information,	ng approval TMC) (Must be i			· · · · · · · · · · · · · · · · · · ·	n



Program Outline of Record – Associate Degree for Transfer (ADT)

Program Narrative

Item 1. Program Goals and Objectives

This degree is designed to facilitate the student's passage from Riverside City College to the California State University (CSU) System with an Associate in Arts in Sociology for Transfer degree. This degree will satisfy the lower division requirements for the eventual conferral of the Bachelor's Degree in Sociology at a CSU. With this degree the student will be prepared for transfer to the university upper division level. Additionally, the intent of an associate degree for transfer is to assist students in seamlessly transferring to a CSU.

Item 2. Catalog Description

The Associate in Arts in Sociology for Transfer degree is designed to prepare the student for transfer to four-year institutions of higher education and specifically intended to satisfy the lower division requirements for the Baccalaureate Degree in Sociology at a California State University. It will also provide the student with a sufficient academic basis from which to pursue a career in the social science professions. The student will be afforded the opportunity to study the nature of the human affinity for aggregation and the complexities of societal organization. The breadth of Sociology will be examined to include the historical and contemporary theory and research as the basis from which to gain an in-depth awareness and understanding of the world in which we live.

Program Learning Outcomes

Upon successful completion of this program, students should be able to:

- Demonstrate an awareness and understanding of the historical and contemporary theoretical frameworks that form the basis of Sociological study.
- Demonstrate the utility of past and present sociological research and the research methodologies that form the basis of sociological inquiry.
- Demonstrate the ability to be academically proficient in at least two specific areas of sociological emphasis, i.e., Marriage and family, Race/Ethnicity, Culture, Crime and Deviance, Social Problems.
- Demonstrate an understanding of the basic principles for at least one of the social sciences beyond sociology, i.e., Anthropology or Psychology.

Required Courses: 12-14 units

Course	Title	Units
SOC 1/1H	Introduction to Sociology/Honors	3
SOC 2	American Social Problems	3

Choose one of the following courses:

MAT 12/12H OR	Statistics/Honors OR	4
PSY/SOC 48	Statistics for the Behavioral Sciences	3

Choose one of the following courses:

SOC 50 OR	Introduction to Social Research Methods OR	3
PSY 50	Research Methods in Psychology	4

List A: Select one course below:



Program Outline of Record – Associate Degree for Transfer (ADT)

Course	Title	Units
SOC 12	Marriage and Family Relations	3
SOC 25	Introduction to the Sociology of Sex and Gender	3
SOC 10/10H	Race and Ethnic Relations/Honors	3
SOC 20	Introduction to Criminology	3
PSY 8	Introduction to Social Psychology	3

List B: Select one course below or any course not already used above from List A:

Course	Title	Units
SOC 15	Introduction to Women's Studies	3
SOC 21	Deviance	3
SOC 3	Social Inequality	3
ANT 2/2H	Cultural Anthropology/Honors	3
ETS 1	Introduction to Ethnic Studies	3
ADJ 1	Introduction to the Administration of Justice	3

ASSOCIATE IN Arts FOR TRANSFER DEGREE

The Associate in Arts in Sociology Transfer degree will be awarded upon completion of 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC) or California State University General Education (CSUGE) requirements and with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better (or a "P" if taken as Pass/No Pass).

Record -

Associate Degree for Transfer (ADT)

Program Outline

Title: Spanish					
Originator: Norma Flores-Martínez Department: World Languages Date 4/6/2022					
(Please note: ADTs ar	•	co College			
TOPs Code: 1105.0	00 Spanish	CIP Code: 16.0905 Spanish Language and Literature			
Type of ADT: Transfer	⊠ Associate in Arts for T	ransfer □ Associate in Science for			
This is a:	□ New ADT				
	dicate any changes such as title,	ase specify the changes being made: description, learning outcomes, courses, unit values, etc.)			
,	ormation will be presented to the due to removing SPA 3N course	,			
	orm and the documents outline ommittee via TechReview@rc	Documentation: d below to your college coordinator and the District cd.edu. Please do not submit your proposal until all of			
All new and modifi	ed ADTs must include the fo	allowing.			

An new and indunied AD15 must include the following.

- ☑ Evidence of district-wide discipline communication
- ☑ Department minutes showing approval
- ☑ Narrative (See next page)
- ☑ C-ID or Assist Articulation Information, and the most current TMC Template (Work with your Articulation Officer to obtain this documentation)

Record -

Associate Degree for Transfer (ADT)

Program Narrative

Item 1. Program Goals and Objectives

Upon successful completion of this program, students should be able to:

- Demonstrate critical thinking skills in Spanish by interpreting and articulating ideas, questions, opinions and information at the high-intermediate level, both orally and in writing.
- Analyze the practices, products and perspectives of the Spanish-speaking countries and peoples throughout a comparison of Hispanic cultures and their own.

Item 2. Catalog Description

The Associate in Arts in Spanish for Transfer provides transfer majors with a strong foundation not only in the four basic language skills (listening comprehension, reading comprehension, speaking and writing), but also in the civilization and cultures of Spain and Latin America. The degree emphasizes the acquisition of communicative competence and the development of intercultural awareness, appreciation and understanding. Additionally, the Spanish courses align well with preparation for transfer majors in related fields such as liberal arts, language arts and linguistics, and complement majors in international relations, political science, business, education, sociology and other areas of study at UC, CSU, and private colleges and universities.

Required Courses: 20 units

Course	Title	Units
SPA-1*/IH	Spanish 1/Honors Spanish 1	5
SPA-2/2H	Spanish 2/Honors Spanish 2	5
SPA-3	Spanish 3	5
SPA-4	Spanish 4	5

Elective Courses: <u>3</u> units

Course	Title	Units
SPA-8*	Intermediate Conversation	3
SPA-11*	Spanish Culture and Civilization	3
SPA-12*	Latin American Culture and Civilization	3

^{*}Course may be also used to fulfill general education requirements for the CSUGE or IGETC patter.

If a student has taken at AP Spanish Literature and Culture exam and obtained a score of 3, 4, or 5, three units of credit can be applied under List A.

Note: If a student places out of any required course and is not awarded units for that course, the student will have to take additional units to compensate for the course/units needed to reach at least 18 total units in the major (per Title 5 regulations). Appropriate course substitutions may be from List A or the courses listed below. Any other course substitution must be approved by the Spanish faculty of World Languages.

ANT-2/2H*	Cultural Anthropology/Honors Cultural Anthology	CSU Area D
ANT-8*	Language and Culture	CSU Area D
AHS-13*	Pre-Columbian Art History	CSU Area C1
AHS-14*	Latin American Art: Colonial to the Present	CSU Area C1





Record -

Associate Degree for Transfer (ADT)

COM-12*	Intercultural Communication	CSU Area D
ENG-25*	Latinx Literature of the United States	CSU Area C2
GEG-2*	Human Geography	CSU Area D
HIS-31*	Introduction to Chicana/o/x Studies	CSU Area C2 or D
POL-21	Latinx Politics	UC, CSU Area F or D
POL-23/ETS-23	Race, Ethnicity and Politics in America	UC, CSU Area F or D
SOC-1/1H*	Introduction to Sociology/Honors Introduction to Sociology	CSU Area D
SOC-10/10H*	Race and Ethnic Relations/Honors Race and Ethnic Relations	CSU Area D

ASSOCIATE IN ARTS FOR TRANSFER DEGREE

The Associate in Arts in Spanish for Transfer degree will be awarded upon completion of 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC) or California State University General Education (CSUGE) requirements and with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better (or a "P" if taken as Pass/No Pass).



Program Outline

Title: Graphic Design and Digital Media					
Originator: Patrick Sculli	n	Date 5/2/2022			
Department: Applied Digital	Department: Applied Digital Media and Printing				
	□ Norco College ificates are college specific. If multip d college specific supporting docume	☐ Riverside City College le colleges wish to adopt this degree or ents are required.)			
TOPs Code:	CIP Code:				
Type of Program: ☐ Certificate of Achievement of ☐ Associate Degree only	only ☐ Locally approved cer ☐ Certificate of Achiev	rtificate (8-units or less) only vement <u>and</u> Degree			
Type of Associate Degree:	☐ Associate of Arts				
This is a: ☐ New certific	eate/degree Modification	n to an existing certificate/degree			
	existing certificate/degree, pleas hanges to title, description, learning	se specify the changes being made: outcomes, courses, unit values, etc.)			
Three foundation courses nee certificate/degree. This includ	•	se list for all emphasis areas of this			
Rationale: (Please note: This information will	l be presented to the Board of Truste	es.)			
skill competencies. These courgive students additional credi	rses are currently offered on otl	outcomes and will improve student her ADM AOE certificates and will This completes the ADM alignment letion.			
Required Documentation Please submit this form and the documents outlined below to your college coordinator and the District Technical Review committee via TechReview@rccd.edu. Please do not submit your proposal until all of the documentation below is complete.					
All Degrees and Certificates ☐ Evidence of district-wide dis ☐ Department minutes showing ☐ Narrative (see following page) ☐ Transfer preparation docume	g approval				



Degrees and Certificates of 8 Units or More with Vocational TOPs Codes In addition to the above, all degrees and certificates of 8 units or more with a vocational TOPs code must include the following to be submitted to the State Chancellor's Office for approval.* □ Labor Market Information and Analysis (Required for new programs and modifications.) □ Advisory Committee Recommendation (Required for new programs and may be required for modifications. Check with the curriculum coordinator at your college to determine if a new recommendation is necessary.) □ Regional Consortium Recommendation (Required for new programs only.)

*Certificates between 8 and less than 16 units can be approved locally or can be submitted to the State Chancellor's Office for approval. Certificates of less than 8 units can only be approved locally. However, locally approved certificates will not appear on student transcripts.

Program Narrative

Item 1. Program Goals and Objectives

For programs with a vocational TOPs code, must address a valid workforce preparation purpose. For programs with a non-vocational TOPs code, must address a valid workforce preparation, basic skills, civic education, or local purpose. May address transfer preparation if applicable.

The Graphic Design and Digital Media degree, offered by the Applied Digital Media and Printing program, provides prospective learners from a diverse community with hands-on training in the fields of graphic design and digital media. Successful completion of this career-technical program will equip students with foundational skills and practical knowledge in all aspects of design elements, design principles, and multimedia design production. Possible career outcomes for this program include: production artist, junior graphic designer, graphic designer, art director, digital illustrator, advertising designer, brand designer, digital 2D animator, 3D animator, motion graphics designer, web designer, rich content creator, multimedia designer, image editor and design marketing. Relevancy of this program is maintained via annual input from an advisory committee, employment data and industry feedback.

Item 2. Catalog Description

Includes program requirements, prerequisite skills or enrollment limitations, program learning outcomes, and information relevant to program goal.

This program prepares students for a wide variety of careers in graphic design and digital media production. This includes instruction in graphic design, typography, digital illustration, photo manipulation, web design, animation, motion graphics, advertising design, entertainment graphics, and production art, using the latest equipment and software available. Classes are structured to give strong academic and hands-on experience for entry into the graphic design and digital media industry.

Program Learning Outcomes

Upon successful completion of this program, students should be able to:

- Demonstrate graphic design and layout principles consistent with the principles and elements of design.
- Analyze and explain methods and techniques to design aesthetically pleasing and effective typographic communication.

- Utilize various digital image-editing tools to edit, retouch, manipulate, enhance, optimize and composite raster-based images for a broad range of graphic design and digital media usages.
- Understand the technical differences and advantages of raster-based and vector-based images for various design outputs and digital applications.
- Understand the unique challenges of creating rich content for today's digital, mobile and cross-platform design environment.
- Create effective motion graphics designs and multimedia animations for various marketing, advertising and promotional narratives.
- Demonstrate solid understanding in today's modern web technology, website structure and the importance of user experience (UX) and user interface (UI) in the context of digital design.
- Utilize various web design and web development tools effectively in order to create digital content for a wide range of online distribution, promotion and e-commerce.
- Understand the technical differences and advantages of various digital, video and audio file formats in the context of graphic design and digital media.

The ADM program prepares students for the following careers in graphic design and digital media: production artist, junior graphic designer, graphic designer, art director, digital illustrator, advertising designer, brand designer, digital 2D animator, 3D animator, motion graphics designer, web designer, rich content creator, multimedia designer, image editor and design marketing.

Item 3. Program Requirements

Includes course requirements and sequencing that reflect program goals. For degrees, the GE pattern and calculations used to reach the degree total must be shown following the program requirements table. Course titles and unit values must be exact.

Required Courses: _31 units

Course	Title	Units	Sequencing
ADM-1	Introduction to Applied Digital Media	3	Semester 1, Fall
ADM-2A	Color Systems and File Management	2	Semester 1, Fall
ADM-2B	Prepress and Printing Substrates	2	Semester 1, Fall
ADM-71A	Adobe Photoshop for Image Manipulation	3	Semester 1, Fall
ADM-62	Typography and Graphic Design	3	Semester 2, Spring
ADM-63A	Design for Print Publication	3	Semester 2, Spring
ADM-77A	Adobe Illustrator for Graphic Art	3	Semester 2, Spring
ADM-71B	Adobe Photoshop, Advanced	3	Semester 3, Fall
ADM-63B	Design for Electronic Publication	3	Semester 3, Fall
ADM-77B	Adobe Illustrator, Advanced	3	Semester 4, Spring
ADM-70	Project Production and Portfolio	3	Semester 4, Spring

Digital Media Emphasis Elective Courses: 6 units

Course	Title	Units	Sequencing
FTV-64A	Beg. Digital Editing Principles & Techniques	3	Semester 3, Fall
PHO-20	Introduction to Digital Photography	3	Semester 3, Fall

Motion Graphics Emphasis

Elective Courses: 6 units

Course	Title	Units	Sequencing
ADM-67	Multimedia Animation	3	Semester 3, Fall
ADM-69	Motion Graphics and Special FX with After Effects	3	Semester 3, Fall

Digital Animation Emphasis

Elective Courses: 6 units

Course	Title	Units	Sequencing	
ADM-68A	3D Animation with Maya I	3	Semester 3, Fall	
ADM-68B	3D Animation with Maya II	3	Semester 4, Spring	

Or

Elective Courses: 6 units

Course	Title	Units	Sequencing
ART-50A	Beginning Storyboarding	3	Semester 3, Fall
ART-50B	Intermediate Storyboarding	3	Semester 4, Spring

Digital Illustration Emphasis

Elective Courses: 6 units

Course	Title	Units	Sequencing
ART-36A	Computer Art - Introduction	3	Semester 3, Fall
ART-36B	Computer Art - Intermediate	3	Semester 4, Spring

Web Design Emphasis

Elective Courses: 6 units

Course	Title	Units	Sequencing
ADM-74A	Web Design	3	Semester 3, Fall
ADM-74B	Web Design with Dreamweaver	3	Semester 4, Spring

Or

Elective Courses: 6 units

Course	Title	Units	Sequencing	
CIS-72A	Introduction to Web Page Creation	1.5	Semester 3, Fall	
CIS-72B	Intermediate Web Page Creation using CSS	1.5	Semester 3, Fall	
CIS-76B	Adobe Dreamweaver	3	Semester 4, Spring	

Business Emphasis

Elective Courses: 6 units

Course	Title	Units	Sequencing
ADM-55	Business Mngmnt for Graphic Communications	3	Semester 4, Spring
MKT-40	Advertising	3	Semester 3, Fall

Total Program Units: 37 units



Item 4. Master Planning

Must address how the certificate/degree fits in the mission, curriculum, and master planning of the college and higher education in California.

The Applied Digital Media and Printing Program (ADM) is part of the Applied Technology Department, a division of CTE at Riverside City College (RCC). The ADM program prepares a diverse population of students to become professionals and entrepreneurs in graphic communications. This includes technical instruction, hands-on training, software competency and visual communication skills that prepare students for productive careers in design, printing and multimedia communication while providing a pathway for further academic achievement. Originally founded in 1921 as part of an early printing vocational training program, ADM has continued to evolve year after year to meet the training needs of the graphic communication industry.

The Applied Digital Media and Printing program is a PrintED accredited. PrintED accreditation is a national accreditation program administered by the Graphic Arts Education and Research Foundation (GAERF®). PrintED certifies that the ADM program meets industry specific standards for instruction in key skills competency areas. These include: digital file preparation and output, digital production printing, graphic design, introduction to graphic communications, offset press operations, bindery and finishing, and screen printing. These industry standards are integrated into the current ADM program learning outcomes (PLOs) and into the course specific student learning outcomes (SLOs) of the curriculum.

The ADM program offers a state-approved two-year associate's degree and program certificate in addition to four, one-year completion certificates. The degree and certificate provide a comprehensive program of study while the completion certificates focus on technical training in specific career areas. The degree and certificates are listed as follows:

- Applied Digital Media and Printing Degree (AS653) 34 Units + GE Units
- Applied Digital Media and Printing Certificate (CE653) 34 Units
- Basic Graphic Design Certificate (CE939) 17 Units
- Basic Graphic Communication Certificate (CE949) 17 Units
- Electronic Publishing and Design Certificate (CE951) 17 Units
- Motion Graphics and 3D Animation Certificate (CE952) 17 Units

ADM faculty regularly update their curriculum and evaluate program equipment and training course outcomes regularly in partnership with local industry advisors. Classrooms, lab facilities, industry specific software and technical equipment are maintained and updated by the college and through the assistance of state and federal grants and industry donations.

Item 5. Enrollment and Completer Projections

Projection of number of students to earn certificate/degree annually.



Applied Digital Media and Printing program required courses are offered every semester to assist student completion rates. The majority of the scheduled courses satisfy degree requirements for multiple certificates. This provides ADM students with a variety of available pathways to completion. The target completion rate for the Graphic Design and Digital Media degree is 12 students annually.

Graphic Design and Digital Media Required Courses Enrollment Totals

Course	Title	Annual # Sections	Section Enrollment	Annual Enrollment Total
ADM 1	Intro to Applied Digital Media & Printing	3	24	72
ADM 2A	Color Systems and File Management	2	24	48
ADM 2B	Prepress and Printing Substrates	2	24	48
ADM 55	Business Management For Graphic Comm.	1	24	24
ADM 62	Typography and Graphic Design	2	24	48
ADM 63A	Design for Print Publication	3	24	72
ADM 63B	Design for Electronic Publication	1	24	24
ADM 70	Project Production and Portfolio	3	24	24
ADM 71A	Adobe Photoshop for Image Manipulation	6	24	144
ADM 71B	Adobe Photoshop, Advanced	1	24	24
ADM 77A	Adobe Illustrator for Graphic Art	4	24	96
ADM 77B	Adobe Illustrator, Advanced	1	24	24

Item 6. Place of Program in Curriculum/Similar Programs

Must address how the certificate/degree fits in college's existing inventory.

This degree is part of the existing Applied Digital Media and Printing program at Riverside City College. ADM is the primary graphic communications training program in the district and does duplicate or conflict with any other college or district program offerings.

Item 7. Similar Programs at Other Colleges in Service Area

Justification of need for certificate/degree in the region.

Applied Digital Media and Printing is the only graphic communications program in the Riverside Community College District. While there are many graphic design and digital media programs throughout the state of California, ADM is uniquely positioned as one of the only programs that also includes commercial printing and production skills training and certificates.

Item 8. Transfer Preparation Information (if applicable)

If transfer preparation is a component of the certificate/degree, please provide transfer preparation information.