

#### District Technical Review Committee Meeting Agenda

Tuesday, April 5, 2022	2:30-4:00pm
<b>Committee Members</b>	Guests
☐ Steven Schmidt (Chair, MUS)	☐ Lijuan Zhai (AVC Ed Services and
	Institutional Effectiveness, RCCD)
☐ Jeannie Kim (Co-Chair, VC Ed. Service	s) 🗆 Bryan Nicol (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**

https://rccd-edu.zoom.us/j/94446665132?pwd=UHVmdWcwK1M2ZHJYc04zb0svWVRKUT09

+1 669 900 6833 US

Meeting ID: 944 4666 5132

Passcode: 316432

#### **Agenda and Minutes**

- 1. Approval of Agenda
- 2. Approval of Minutes March 15, 2022

#### **Action Items**

1. Curriculum Proposals

#### **Discussion Items**

1. Math Flow Chart and Placement Rules – Jeanne Howard

#### **Program Documentation**

- 1. New Programs
  - a. Data Analytics Norco
  - b. Data Analytics Riverside
  - c. Early Childhood Education School Age Moreno Valley
  - d. Data Science Norco



- e. Data Science Riverside
- f. Noncredit Essential Revit Norco
- g. Noncredit Essential 3D Tour Norco
- h. Noncredit Essential CAD Norco
- i. Noncredit Essential SolidWorks Norco
- j. Noncredit Essential Fusion 360 Norco

#### 2. Program Modifications

- a. Elementary Teacher Education Riverside
- b. Fine and Applied Arts AOE
- c. Communication, Media and Languages AOE
- d. Social Work Administration Studies Moreno Valley
- e. Careers in Social Work Moreno Valley
- f. Education, Human Development and Special Needs Riverside
- g. Dental Assistant Moreno Valley

# Technical Review - Curriculum Proposals Proposals for 04/05/2022

C	Courses					
C	ourse Deletio	ns	MNR	Notes		
Н	CAT 3 Holding to address	Computer Applications for Business associated programs in the spring.				
Н	CIS 3 Holding to address	Computer Applications for Business associated programs in the spring.				
C	ourse Inclusio	ons	MNR	Notes		
	CIS 61	Introduction to Database Theory				
	CIS 63	Introduction to Structured Query Language (SQL)				
C	ourse Major I	<u>Modifications</u>	M N R	Notes		
	ADJ 12	Introduction to Criminalistics	<b>V V</b>			
Н	ART 41B Missing prerequisi	Figure Painting-Intermediate te skills for 40A.				
Н	BUS 30 Title change, cours	Inter-disciplinary - Entrepreneurship Overview se is in MOV program.	<b>V V</b>			
	CON 62	Print Reading for Construction				
	ELE 61	Robotics for Manufacturing				
Н	ETS 2 Held to await cros	Introduction to Chicanx and Latinx Studies slisted HIS 31 (now HIS 61).				
Н	HMS 50 Held for crosslisted	Introduction to African American Families and Populations				
Н	HMS 51 Held for crosslisted	Introduction to Latina and Latino American Families and Populations	<b>V</b>			
Н	HMS 52 Held for crosslisted	Introduction to Asian American Families and Populations				
Н	HMS 53 Held for crosslisted	Introduction to Native American Families and Populations	<b>V</b>			
	MAN 61	Robotics for Manufacturing				
Н	MAT 26 Course is found in	Math for Elementary School Teachers an ADT and AS at RCC. Short title does not match long title.				

C	Courses					
C	ourse Major I	Modifications	M N R	Notes		
	POL 14	Internship in Political Science				
	POL 2	Comparative Politics	<b>V V</b>			
	POL 2H	Honors Comparative Politics	<b>V V</b>			
	POL 5	Introduction to Law	<b>V V</b>			
Н	RLE 81 For RLE courses, v	Real Estate Practices arious revisions to content needed.	<b>V V</b>			
Н	RLE 82	Legal Aspects of Real Estate	<b>V V</b>			
н	RLE 83	Real Estate Finance	<b>V V</b>			
Н	RLE 84	Real Estate Appraisal	<b>V V</b>			
н	RLE 85	Real Estate Economics	<b>V V</b>			
Н	RLE 86	Escrow Procedures I	<b>V V</b>			
	ourse Minor   CAT 814 Holding for BUS c	Modifications  Business Skills: Professional Communication Basics rosslisting.	M N R ✓ □ ✓	Notes		
Н	CAT 817 Holding for BUS co	Business Skills: Professional Self-Management rosslisting.	<b>V V</b>			
Н	PDS 808 Holding for CAT cr	Critical Thinking, Problem Solving and Decision Making rosslisting.	<b>V V</b>			
Н	PDS 810 Holding for CAT cr	Time Management rosslisting.	<b>V V</b>			
Н	PDS 811 Holding for CAT cr	High Impact Presentations and Proposals for the Work Place rosslisting.				
Н	PDS 812 Holding for CAT cr	Workplace Communication Strategies rosslisting.				
Distance Education		MNR	Notes			
	EAR 810DE	Family Child Care – Our Business	<b>V V</b>			
	EAR 811DE	Family Child Care – Our Curriculum	<b>V V</b>			
	EAR 812DE	Family Child Care – Our Family and Community	<b>V V</b>			
	HUM 8DE	Introduction to Mythology	<b>V V</b>			
	MAT 109DX	Corequisite Support for Math 9	<b>V V</b>			

C	Courses					
D	istance Educa	tion_	MNR	Notes		
	MAT 9DE	BSTEM College Algebra				
<u>E</u> :	xtensive Labs		MNR	Notes		
	GEO 4	Earth Science for Educators				
Н		Foundations of Data Science 70A is still needed to ensure the crosslisted courses match. with originator to further discuss the proposal.	<b>✓ ✓ ✓</b> Kelly			
Н	MAT 70B Kelly and Ann will	Statistics for STEM meet with originator to further discuss the proposal.				
N	ew Courses		M N R	Notes		
Н	EAR 57 Updates to conten	School Age Child Care Programs and Curriculum t are needed.				
Н	EAR 58 Updates to conten	Recreational Leadership in School Age Child Care t are needed.				
Н	EAR 59 Updates to conten	Practicum in School-Age t are needed.				
	ENE 35B	Dynamics				
	ENE 35C	Strength of Materials				
G	eneral Educ	ation				
G	eneral Educat	tion Modifications	MNR	Notes		
Н	MUS 98 Holding for further	Careers and Entrepreneurship in Music and the Arts discussion.				
P	rograms					
N	ew Programs		MNR	Notes		
Ce	ertificate					
	CIS	Data Analytics				
	CIS	Data Analytics				
Н	EAR Held for new cours	Early Childhood Education School Age ses not yet at Tech Review.				
D	egree					
	CIS	Data Science				
	CIS	Data Science				

Programs					
New Progr	rams	MNR	Notes		
Non-Credit Co	ertificate				
ARE	Noncredit Essential Revit				
ARE	Noncredit Essential 3D Tour				
DFT	Noncredit Essential CAD				
DFT	Noncredit Essential SolidWorks				
DFT	Noncredit Essential Fusion 360				
Program N	<u>Nodifications</u>	MNR	Notes		
EAR	Elementary Teacher Education				
AOE					
ART	Fine and Applied Arts				
СОМ	Communication, Media and Languages				
Certificate					
H HMS	Social Work Administration Studies				
H HMS	Careers in Social Work	<b>V</b>			
Degree					
EAR	Education, Human Development and Special Needs				
Degree & Cer	tificate				
DEA	Dental Assistant				

### **Technical Review Committee**

Proposals for Review for Meeting: 04/05/2022

Co	urses				
Cou	urse Dele	<u>etions</u>	MNR	Discussion	Actio
-	AT 3 ationale:	Computer Applications for Business  Revision of every component of this COR was completed as a part of the discipline CTE 2 Year Curriculum Review Cycle (2/2020)	<b>✓ ✓ ✓</b> district	Holding to address associated programs in the spring.	
4	IS 3 ationale:	Computer Applications for Business  Revision of every component of this COR was completed as a part of the discipline CTE 2 Year Curriculum Review Cycle (beg. 12/2016)	<b>✓ ✓ ✓</b> district	Holding to address associated programs in the spring.	
<u>Coι</u>	urse Inclu	<u>usions</u>	MNR	Discussion	Action
	IS 61 ationale:	Introduction to Database Theory Students pursuing a degree of transfer in Data Science will need this cour complete the degree.	□ ✔ □		
	IS 63 ationale:	Introduction to Structured Query Language (SQL) Students pursuing a degree of transfer in Data Science will need this cour complete the degree.	rse to		
Coı	urse Maj	or Modifications	MNR	Discussion	Actio
	DJ 12 ationale:	Introduction to Criminalistics  This major modification is required to update curriculum, add course objust and revise student learning outcomes.	<b>✓ ✓ ✓</b> ectives		
ı	RT 41B ationale:	Figure Painting-Intermediate sequential study, replacing repeatable course with levels.		Missing prerequisite skills for 40A.	
		Moreno valley excluded this course from their inventory, approved by th April 19, 2016.	e BOT on		
1 -	US 30 ationale:	Inter-disciplinary - Entrepreneurship Overview  Updated name and course so it is better suited for both business and nor business majors	<b>V V</b>	Title change, course is in MOV program.	

#### Courses **Course Major Modifications** MNR Discussion Action **CON 62 Print Reading for Construction** Rationale: **Updating** content **ELE 61 Robotics for Manufacturing** We plan on making this course more practical to the industry and to remove the Rationale: content that teaches microprocessors and Boe-Bots. 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 HMS 50** 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 Introduction to Latina and Latino American Families and Held for crosslisted ETS partner. **HMS 51 Populations** Revised the five SLOs as provided by the California State University Council on Rationale: 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 **MAN 61 Robotics for Manufacturing** Rationale: We plan on making this course more practical to the industry and to remove the content that teaches microprocessors and Boe-Bots. Course is found in an ADT and AS at RCC. Short **MAT 26** Math for Elementary School Teachers title does not match long title. Rationale: This course needs to be updated to meet RCCD's curriculum guidelines.

Objectives will be added and SLOs will be modified.

C	ourses				
<u>C</u>	ourse Maj	or Modifications	MNR	Discussion	Action
	POL 14 Rationale:	Internship in Political Science  Course has not been offered in over 10 years and is being updated to refinternship opportunities for students in RCCD.	□ □ 🗸 lect new		
	POL 2 Rationale:	Comparative Politics  Updated course materials, SLO's, and expanded methods of instruction a content.	<b>✓</b> ✓ ✓		
	POL 2H Rationale:	Honors Comparative Politics  Course needed updating of textbooks and methods of instruction as well substantial expansion of content.	<b>✓</b> □ <b>✓</b> l as		
	POL 5 Rationale:	Introduction to Law  The course has been significantly rewritten to be articulated directly to s the CSU and UC systems.	<b>✓</b> ✓ ✓ chools in		
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.

C	Courses					
C	ourse Majo	or Modifications	MNR	Discussion	Action	
Н	RLE 86 Rationale:	Escrow Procedures I  This course is being updated as a major modification to include current relevant SLOs, detailed course content, detailed assignments and updatextbook information.				
<u>C</u>	ourse Mind	or Modifications	MNR	Discussion	Action	
н	CAT 814 Rationale:	Business Skills: Professional Communication Basics Two-year review. Update to text book.	<b>V V</b>	Holding for BUS crosslisting.		
н	CAT 817 Rationale:	Business Skills: Professional Self-Management Two-year review with text update.	<b>V V</b>	Holding for BUS crosslisting.		
Н	PDS 808 Rationale:	Critical Thinking, Problem Solving and Decision Making Two year CTE review. No changes needed.		Holding for CAT crosslisting.		
н	PDS 810 Rationale:	Time Management Two year CTE review. No changes needed.		Holding for CAT crosslisting.		
н	PDS 811 Rationale:	High Impact Presentations and Proposals for the Work Place Two year CTE review. No changes needed.		Holding for CAT crosslisting.		
н	PDS 812 Rationale:	Workplace Communication Strategies Two year CTE review. No changes needed.		Holding for CAT crosslisting.		
<u>D</u>	istance Ed	<u>ucation</u>	MNR	Discussion	Action	
	EAR 810DE Rationale:	Family Child Care – Our Business	<b>V V</b>			
	EAR 811DE Rationale:	Family Child Care – Our Curriculum	<b>V V</b>			
	EAR 812DE Rationale:	Family Child Care – Our Family and Community				
	HUM 8DE	Introduction to Mythology				

Rationale:

C	Courses								
D	istance Ed	<u>ucation</u>	MNR	Discussion	Action				
	MAT 109DX Rationale:	Corequisite Support for Math 9	✓ ✓						
	MAT 9DE Rationale:	BSTEM College Algebra							
Extensive Labs		MNR	Discussion	Action					
	GEO 4 Rationale:	Earth Science for Educators  GEO-4 (Earth Science for Educators) is a lecture (54 hours) and combination course oriented towards students seeking to become teachers in a K-12 setting. The lab portion of this course require preparation to both assist students in reaching their course go proper and safe deployment and maintenance of geological same resources used to complete each lab. The preparation require is equivalent to other lab courses in the GEO discipline (i.e. GEO each of which have been approved and are offered each seme preparation courses.	ome Earth Science res extensive als and also for the imples, tools and id for each GEO4 lab O1B and GEO1L),						
Н	MAT 70A Rationale:	Foundations of Data Science See attachments		A proposal for CIS-70A is still needed to ensure the crosslisted courses match. Kelly and Ann will meet with originator to further discuss the proposal.					
н	MAT 70B Rationale:	Statistics for STEM See attachments	<b>V V</b>	Kelly and Ann will meet with originator to further discuss the proposal.					
N	ew Course	<u>es</u>	MNR	Discussion	Action				
Н	EAR 57 Rationale:	School Age Child Care Programs and Curriculum  This course will help meet the needs of our community. Currer workers are not required to have units in early childhood educage certificate is designed to prepare students for working in a programs that serve older children.	cation. The school-	Updates to content are needed.					

C	Courses						
Ν	New Courses			Discussion	Action		
Н	EAR 58 Rationale:	Recreational Leadership in School Age Child Care  The School-Age certificate will help meet the needs of our community. As school programs are growing throughout the Inland Empire and workers required to have ECE units. This certificate is designed to prepare student working in after-school programs that will serve older children.	are not	Updates to content are needed.			
Н	EAR 59 Rationale:	Practicum in School-Age  The school-age certificate will help meet the needs of our community.		Updates to content are needed.			
	ENE 35B Rationale:	<b>Dynamics</b> The course is needed to support transfer student needs for multiple engi majors. The course is an extension of ENE 35 statics which Norco College offers.	_				
	ENE 35C Rationale:	Strength of Materials  The course is needed to support engineering transfer students prepare a transfer requirements.	☐ ✔ ☐ nd satisfy				
G	General Education						
G	ieneral Edu	cation Modifications	MNR	Discussion	Action		
Н	MUS 98 Rationale:	Careers and Entrepreneurship in Music and the Arts Proposal to include MUS 98 Careers in Music in RCCD GE Area E 2		Holding for further discussion.			

**Programs New Programs** Action MNR Discussion Certificate CIS **Data Analytics** 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 CIS **Data Analytics** 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 Early Childhood Education School Age** Held for new courses not yet at Tech Review. **EAR** Rationale: The School-Age certificate will help meet the needs of our community. The

**Regional Consortium** 

serve older children.

LMI

**Narrative** 

Documents:

number of after-school programs are growing throughout the county. This certificate is design to prepare students for working in after-school programs that

**Advisory Committee** 

**Programs New Programs** Action MNR Discussion Degree CIS Data Science 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 CIS **Data Science** 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** Non-Credit Certificate ARE Noncredit Essential Revit Rationale: To make this program available to a broader range of student and professionals who just need the training and increase the level of skills in the community. **Narrative Employment Potential** 

Documents:

Programs				
New Progra	<u>ms</u>	/IN R	Discussion	Action
Non-Credit Cer	tificate			
ARE	Noncredit Essential 3D Tour			
Rationale:	To make this program available to a broader range of students and professio who just need the training and increase the level of skills in the community.	nals		
Documents:	Narrative Employment Potential			
DFT	Noncredit Essential CAD			
Rationale:	To make this program available to a broader range of students and professio who just need the training and increase the level of skills in the community.	nals		
Documents:	Narrative Employment Potential			
DFT	Noncredit Essential SolidWorks			
Rationale:	To make this program available to a broader range of student and profession who just need the training and increase the level of skills in the community.	ials		
Documents:	Narrative Employment Potential			
DFT	Noncredit Essential Fusion 360			
Rationale:	To make this program available to a broader range of student and profession who just need the training and increase the level of skills in the community.	ials		
Documents:	Narrative Employment Potential			
Program Mo	<u>odifications</u>	∕IN R	Discussion	Action
ADT				
EAR	Elementary Teacher Education			
Rationale:	Updating MAT 26 due to increased unit value.			
AOE				
ART	Fine and Applied Arts			
Rationale:	Updating AOE to reflect curricular changes in Elective ENG courses: Existing courses (ENG 38 and 39) have been deleted from District curriculum holdings a new sequenced course (ENG 38 ABC) has replaced deleted courses.	s and		
СОМ	Communication, Media and Languages			
Rationale:	Updating AOE to reflect curricular changes in ENG courses: Existing courses (38 and 39) have been deleted from District curriculum holdings and a new sequenced course (ENG 38 ABC) has replaced deleted courses.	(ENG		

Pro	Programs						
Prog	gram M	<u>odifications</u>	MNR	Discussion	Action		
Certi	ficate						
H Ra	<b>/IS</b> tionale:	Social Work Administration Studies	<b>V</b>				
H Ra	<b>//S</b> tionale:	Careers in Social Work	<b>V</b>				
Degr	ee						
<b>EA</b> Ra	<b>R</b> tionale:	<b>Education, Human Development and Special Needs</b> Update of MAT 26 due to unit change.					
Degr	ee & Certi	ificate					
<b>DE</b> Ra	tionale:	Dental Assistant  The unit change is necessary as one of the courses, DEA-41 Dental Office Management, had a 0.5 unit increase from 1.5 to 2.0. The verbiage in program goal 2 is being changed to better reflect the program's mission along with a better integration and support of the institution's goals and mission. Program learning outcome #4 will be deleted as the program is unable to measure and assess if the students are achieving this post-graduation.					

# Riverside Community College District Technical Review Committee

Program Documentation for April 5, 2022



<b>Program Outline</b>	
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.



		<u>P</u>	rogram Outline	
Title: Data	Analytics			
	ll degrees and certificates	are colle	orco College ege specific. If multiple colle ic supporting documents are	☐ Riverside City College eges wish to adopt this degree or e required.)
TOPs Code:	070730			CIP Code: 11.0501
Type of Prog ⊠ Certificate	ram: of Achievement only	□ A	ssociate's Degree only	☐ Certificate <u>and</u> Degree
Type of Assoc	ciate Degree:	□ A	ssociate of Arts	☐ Associate of Science
This is a:   ⊠ New certificate/deg  □ New Local certifica		-		existing certificate/degree existing local certificate
				cify the changes being made: nes, courses, unit values, etc.)
quality validation volume. Based of projected to have wage for data at that approxima.	on needs for a cloud platfo on Inland Empire/Desert re we 189 annual job opening. analysis related occupation tely the top 90% of worker.	rm-base egion La s, increa s exceea s in this	d application and building of bor Market Information repsing employment by 8% thr Is the Family Needs Calcula occupation earn self-suffici	est and build tools to meet the data enterprise analytics of large data port, the data-analysis occupation is rough 2024. The 10th percentile hourly ator self-sustainability rate, indicating ent hourly wages. The courses in this transfer to further develop skills and

#### **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**

knowledge in the areas of Data Science.

- □ Discipline
- ☑ 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; 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 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

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: School-	Age Certifica	te			
	degrees and certi		□ Norco College re college specific. If multiple specific supporting document	☐ Riverside City College colleges wish to adopt this degree or is are required.)	
TOPs Code:	1305.50	CIP C	ode: 19.0709		
Type of Progra  ☑ Certificate o  ☐ Associate De	f Achievement	only	☐ Locally approved certif☐ Certificate of Achieven	ficate (8-units or less) only nent and Degree	
Type of Associ	ate Degree:		☐ Associate of Arts	☐ Associate of Science	
This is a:	⊠ New certific	cate	☐ Modification to an exis	ting certificate/degree	
				specify the changes being made: utcomes, courses, unit values, etc.)	
The School-Ago programs are gr	e certificate will	help me out the co	ounty. This certificate is des	) nity. The number of after-school sign to prepare students for working in	
Technical Reviethe documentation  All Degrees an	ew committee vision below is condensed description des	docume ia TechR nplete.	Review@rccd.edu. Please do	college coordinator and the District o not submit your proposal until all of	
<ul><li>☑ Department</li><li>☑ Narrative (se</li></ul>	minutes showing page)	g approv	communication (emails to say al (minutes from the depart form) (only if applicable)		
In addition to	the above, all dhe following to et Information a emmittee Recommercial entriculum coordination.	egrees abe subnad Analymendati	nitted to the State Chancel ysis (Required for new progra on (Required for new progran	or more with a vocational TOPs code llor's Office for approval.*  sums and modifications.)  ms and may be required for modifications.  new recommendation is necessary.)	



\*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

#### Program Goal:

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

#### Learning Outcome(s):

- 1. Students will demonstrate a knowledge base of theory specific to childhood (1st-6th grade) education.
- 2. Students will apply the knowledge base of theory to practice through thoughtful reflections on classroom observations.
- 3. Students will understand and be familiar with the main philosophical and sociological ideas and trends that have influenced education as well as be able to analyze their application and importance for teaching today

#### Student Learning Objectives:

- 1. Students will integrate needs, characteristics, and multiple influences on the development of children birth to age eight as they develop, implement, and evaluate early childhood program practices.
- 2. Students will intentionally use systematic observations, documentation, and other assessment strategies in the design, implementation, and evaluation of environments, curricula, and activities that support learning through developmental play and positive learning outcomes.
- 3. Students will demonstrate positive interaction strategies that support all children's learning, identity, and self-confidence.
- 4. Students will develop strategies that promote respectful, reciprocal partnerships between program teachers, families, and their communities.
- 5. Students will evaluate and incorporate ethical standards and professional behaviors that deepen understanding, knowledge, and commitment to the early childhood profession.

#### **Item 2. Catalog Description**

The School-Age Certificate is designed to be the first step toward entry level employment specializing in the care of children from 6-12 years. It prepares students for working in before and after-school programs or child care facilities that serve older children.

This Certificate meets the course and unit requirements for the Child Development Associate Teacher Permit with a School-Age Emphasis and the Child Development Associate Teacher Permit through the California Commission on Teacher Credentialing.

#### **Program Requirements:** Units Required: 30

Course Number	Course Name	Units
<b>EAR 19</b>	Observation and Assessment	3 units
EAR 20	Child Growth and Development	3 units



E 4 D 6 4		0 '(
<b>EAR 24</b>	Introduction to Curriculum for Early Childhood Education	3 units
EAR 25	Teaching in a Diverse Society	3 units
EAR 26	Health, Safety, Nutrition in Early Childhood Education	3 units
<b>EAR 28</b>	Principles and Practices of Early Childhood Education	3 units
EAR 42	Child, Family and Community	
<b>EAR 57</b>	School Age Child Care Programs and Curriculum	3 units
<b>EAR 58</b>	Recreational Leadership in School Age Child Care	3 units
<b>EAR 59</b>	Practicum Field Experience	3 units

#### **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.

Program Requirements: Units Required: 30

Course	Comments. Office (Codumed. 50		
Number	Course Name	Units	Sequence
<b>EAR 19</b>	Observation and Assessment	3 units	Fall/Spring
EAR 20	Child Growth and Development	3 units	Fall/Spring
<b>EAR 24</b>	Introduction to Curriculum for Early Childhood Education	3 units	Fall/Spring
<b>EAR 25</b>	Teaching in a Diverse Society	3 units	Fall/Spring
<b>EAR 26</b>	Health, Safety, Nutrition in Early Childhood Education	3 units	Fall/Spring
<b>EAR 28</b>	Principles and Practices of Early Childhood Education	3 units	Fall/Spring
<b>EAR 42</b>	Child, Family and Community	3 units	Fall/Spring
<b>EAR 57</b>	School Age Child Care Programs and Curriculum	3 units	<b>Spring</b>
<b>EAR 58</b>	Recreational Leadership in School Age Child Care	3 units	<b>Fall</b>
<b>EAR 59</b>	Practicum Field Experience	3 units	Fall/Spring

#### **Item 4. Master Planning**

<u>Mission of Moreno Valley College</u>: Moreno Valley College is committed to educating and empowering our students, providing equitable access to education, and serving our communities. Moreno Valley College's core mission can be expressed in four words: Education, Empowerment, and Equity.

**Education**: Students will develop paraprofessional skills and knowledge in child development with an emphasis on school age children

**Empowerment**: Students will be empowered as they identify personal strengths which have helped them realize the completion of a certificate.

**Equity**: All coursework is taught through an equity-lens and a respect for children no matter their socioeconomic status, ethnicity, or cultural background.

The School-Age Certificate is designed to prepare students to work in after-school programs that serve older children. Students are offered knowledge about the development of the school age child and the role of the adult in helping to integrate skills and aid classroom learning.



#### Item 5. Enrollment and Completer Projections

EAR 19	Observation and Assessment - 35 students
EAR 20	Child Growth and Development - 35 students
EAR 24	Introduction to Curriculum for Early Childhood Education - 35 students
EAR 25	Teaching in a Diverse Society - 35 students
EAR 26	Health, Safety, Nutrition in Early Childhood Education - 35 students
EAR 28	Principles and Practices of Early Childhood Education - 35 students
EAR 42	Child, Family and Community - 35 students
EAR 57	School Age Child Care Programs and Curriculum – new course; no enrollment
	data available
EAR 58	Recreational Leadership in School Age Child Care - new course; no enrollment
	data available
EAR 59	Practicum Field Experience – 20 students

The certificate program expects to have 15 - 20 students completing this certificate annually beginning in February 2023.

#### Item 6. Place of Program in Curriculum/Similar Programs

The college has no similar degree option and related certificate options are within the same discipline.

#### Item 7. Similar Programs at Other Colleges in Service Area

Within the Riverside Community College district, Moreno Valley College is the only college in the district that is currently offering all of these courses within the certificate program. No college in the area has alike or a similar program.

#### Item 8. Transfer Preparation Information (if applicable)

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



#### **Program Outline**

Title: Data So	cience		
Originator:	Caroline Hutchings	3	<b>Date</b> 3/9/2022
Department: S	chool of Science, Tec	hnology, Engineering, an	d Mathematics
	degrees and certificates	■ Norco College are college specific. If multipge specific supporting docume	le colleges wish to adopt this degree or
TOPs Code:	0707.30 CIP	Code: 11.0501	
Type of Progra	am:		
☐ Certificate of	f Achievement only	☐ Locally approved cer	rtificate (8-units or less) only
⊠ Associate D	egree only	☐ Certificate of Achiev	rement and Degree
Type of Associ	ate Degree:	☐ Associate of Arts	
This is a:	⊠ New certificate/de	gree	to an existing certificate/degree
		0 1	se specify the changes being made: outcomes, 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.



Title: Assoc	iate Degree of Scienc	ce in Data Science	
	ll degrees and certificates	☐ <b>Norco College</b> are college specific. If multiple col  ge specific supporting documents a	
TOPs Code:	070730	CIP Code: 11.0501	
<b>Type of Prog</b> ☐ Certificate	ram: of Achievement only	□ Associate's Degree only	☐ Certificate <u>and</u> Degree
Type of Assoc	ciate Degree:	☐ Associate of Arts	⊠ Associate of Science
This is a:	<ul><li>☑ New certificate/deg</li><li>☑ New Local certific</li></ul>		n existing certificate/degree n existing local certificate
		g certificate/degree, please spo to title, description, learning outco	
volume. Based of projected to have wage for data a that approximal program will al	on Inland Empire/Desert rowe 189 annual job opening on alysis related occupation tely the top 90% of worker.	s, increasing employment by 8% th is exceeds the Family Needs Calcui is in this occupation earn self-suffic	eport, the data-analysis occupation is rough 2024. The 10th percentile hourly lator self-sustainability rate, indicating eient hourly wages. The courses in this o transfer to further develop skills and
Technical Rev		nReview@rccd.edu. Please do n	lege coordinator and the District ot submit your proposal until all of
<ul><li>☑ Discipline</li><li>☑ Departmen</li><li>☑ Narrative ()</li></ul>	nd Certificates  t minutes showing appro- see following page) reparation documentation		
In addition to must include	the above, all degrees the following to be sub	mitted to the State Chancello	nore with a vocational TOPs code
2 years)  ☑ Advisory C  Check with the	Committee Recommenda curriculum coordinator at		and may be required for modifications. recommendation is necessary.)



\*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

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.

#### **Item 2. Catalog Description**

#### Program Requirement:

Before entering this program, student must complete MAT-11 or qualifying placement level in mathematics to be successful in mathematics and analysis courses in the program.

#### **Program Learning Outcomes:**

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

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

#### **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 (NEW)	3	Semester 1
CIS/CSC-61	Introduction to Database Theory (RCC, MVC)	3	Semester 1
CIS-30A or CSC-8	Introduction to Python (MVC) Programming Concepts: Python	3	Semester 1
MAT-70B	Statistics for STEM (NEW)	3	Semester 2
MAT-1A or MAT-1AH	Calculus I / Honors Calculus I	4	Semester 2
CIS/CSC-63	Introduction to Structured Query Language (RCC) – (MVC Adoption)	3	Semester 2
MAT-1B	Calculus II	4	Semester 3
CIS-30E	Advanced Python (MVC)	3	Semester 3
MAT-1C	Calculus III	4	Semester 4
MAT-3	Linear Algebra	4	Semester 4

Elective Courses: 3 units

Course	Title	Units	Sequencing
CIS-68A or	Introduction to Machine Learning (NEW)	3	Semester 3



CIS-68B or	Big Data (NEW)	3	Semester 3
CIS/CSC-2 or	Fundamental of System Analysis	3	Semester 4
CIS/CSC-20	System Analysis and Design (RCC, MVC)	3	Semester 4

Total Program Units: 40 units

#### **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** 

Projected Enrollment for courses is as follows:

		2019-2020		2020-2021	
Course ID	Course Title	Annual Sections	Annual Enrollment	Annual Sections	Annual Enrollment
CIS-1A	Introduction to Computer Information Systems	45	1472	40	1528
CIS/CSC-2	Fundamentals of Systems Analysis	3	86	4	127
CIS/CSC-20*	Systems Analysis and Design	0	0	0	0
CIS/CSC-61	Introduction to Database Theory	1	29	1	38
CAT/CIS-63	Introduction to Structured Query Language	1	20	1	24
CIS-68A		0	0	0	0
CIS-68B		0	0	0	0
CSC-8	Programming Concepts: Python	0	0	0	0
MAT/CIS-70A	Foundations of Data Science (NEW)	0	0	0	0
MAT-70B	Statistics for STEM (NEW)	0	0	0	

<sup>\*</sup>represents revised or new courses. Projected enrollment in new/revised courses in two sections (one per primary term with enrollment at 36-45 students.

#### Item 6. Place of Program in Curriculum/Similar Programs

Most of the courses in the program are active courses that are currently offered at Riverside City College. The new courses will be incorporated into the program. No other programs are similar or the same as the proposed Data Science program.

#### Item 7. Similar Programs at Other Colleges in Service Area

Aside from Moreno Valley College, who is also launched the original, shared curriculum, 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.



Title: Essentia	al Revit	
Originator: Department:	Farshid Mirzaei BEIT	<b>Date</b> 3/3/2022
(Please note: Pr		forco College
TOPs Code:	0201.00 <b>CIP Code:</b> 04.	0901
⊠ Certificate  Please	being proposed as: of Completion (CDCP Eligible) especify non-credit category:	
	ort-Term Vocational	☐ Workforce Preparation
⊔Eng	lish as a Second Language	☐ Elementary and Secondary Basic Skills
	Credit Certificate (Not CDCP Is specify non-credit category:	Eligible; Not Submitted to State Chancellor's Office)
	zenship for Immigrants	☐ Health and Safety
□ Pare	•	☐ Courses for Persons with Substantial Disabilities
⊔ Hor	me Economics	☐ Courses for Older Adults
This is a:		☐ Modification to an existing non-credit certificate
		edit certificate, please specify the changes being made: ecription, learning outcomes, courses, contact hour values, etc.)
-	ogram available to a broader range of skills in the community.	of student and professionals who just need the training and
Technical Revi	this form and the documents outli	d Documentation ned below to your college coordinator and the District precd.edu. Please do not submit your proposal until all of
	nodified programs must include f district-wide discipline commun	
	minutes showing approval	
☐ Narrative (S	See following page)	
☑ Labor Mark  Attached	tet Information and Analysis (For	certificates in the Short-Term Vocational category only)



In2019,therewere2,184combineddraftingjobsintheInlandEmpire/DesertRegion.Draftingoccupationsareexpectedt ohave235annualjobopenings,risingby7%.Exhibit1displays the job counts, five-year projected job growth, job openings, and the share of incumbent workers age 55 years and greater working in the drafting occupational group. (Attached report)



#### **Program Narrative**

#### Item 1. Program Goals and Objectives

*Upon successful completion of the course, students should be able to demonstrate the following activities:* 

- 1. Prepare Architectural drawings including plan, elevation, roof using Autodesk Revit.
- 2. Prepare Architectural rendering, solar study and perspectives using Autodesk Revit

#### **Item 2. Catalog Description**

This program prepares students with the knowledge and skill in using Autodesk Revit Architecture for building Information Modeling on computer to document building information and drawings with architectural details. Students learn to render their architectural design and present solar study using Revit.

#### **Item 3. Program Requirements**

Software is free to students and college. Computer will be accessible by college. Students may use their home computer for homework.

Required Courses: 234 hours

Course	Title	Hours	Sequencing
ARE/DFT-824	Revit I-Architectural Drafting	117	Semester 1, Fall
ARE-825	Revit II-Advanced Architectural Drafting	117	Semester 2, Spring

Elective Courses: 0 hours

Course	Title	Hours	Sequencing
None			

Total Program Units: 234 hours



#### **Item 4. Master Planning**

This certificate serves our students by providing a unique educational opportunity with a cutting-edge technology to a diverse group of talents in creating job opportunity for students, entrepreneurs and professionals who need to update their skills in the architecture drafting field.



## RIVERSIDE COMMUNITY COLLEGE DISTRICT Program Outline of Record — **Non-Credit Certificates**

Title: Essential 3D Tour				
Originator: Farshid Mirzaei Department: BEIT	<b>Date</b> 3/3/2022			
	forco College			
TOPs Code: 0201.00 CIP Code: 04.0	0901			
Certificate is being proposed as:  ☐ Certificate of Completion (CDCP Eligible)  Please specify non-credit category:  ☐ Short-Term Vocational  ☐ English as a Second Language	☐ Certificate of Competency (CDCP Eligible)  ☐ Workforce Preparation ☐ Elementary and Secondary Basic Skills			
☐ Local Non-Credit Certificate (Not CDCP In Please specify non-credit category: ☐ Citizenship for Immigrants ☐ Parenting ☐ Home Economics	☐ Health and Safety ☐ Courses for Persons with Substantial Disabilities ☐ Courses for Older Adults			
This is a:   ⊠ New non-credit certificate	☐ Modification to an existing non-credit certificate			
If this is a modification to an existing non-credit certificate, please specify the changes being made: (Please be specific! Indicate any changes to title, description, learning outcomes, courses, contact hour values, etc.)  Rationale:  To make this program available to a broader range of student and professionals who just need the training and				
increase the level of skills in the community.				
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 new and modified programs must include the following:  □ Evidence of district-wide discipline communication  □ Department minutes showing approval  □ Narrative (See following page)  □ Labor Market Information and Analysis (For certificates in the Short-Term Vocational category only)  Attached				



In2019,therewere2,184combineddraftingjobsintheInlandEmpire/DesertRegion.Draftingoccupationsareexpectedt ohave235annualjobopenings,risingby7%.Exhibit1displays the job counts, five-year projected job growth, job openings, and the share of incumbent workers age 55 years and greater working in the drafting occupational group. (Attached report)



#### **Program Narrative**

#### **Item 1. Program Goals and Objectives**

*Upon successful completion of the course, students should be able to demonstrate the following activities:* 

- 1. Read Architectural documents and blueprints
- 2. Prepare a visual 3D presentation inside or outside a building for potential clients

#### **Item 2. Catalog Description**

The Essential 3D Tour program prepares students with the knowledge and skill in reading Architectural documents and blueprints with technics in presenting an existing building in a three-dimensional virtual tour for later remodeling or design. Students learn to set and use advanced building scanner/camera and drones in presenting spatial aspects of building in a virtual walkthrough or virtual fly around the building and landscapes.

#### **Item 3. Program Requirements**

Building Scanner, Camera and virtual tour software will be provided by college. Students need a software access and a computer for home assignments.

Required Courses: 279 hours

Course	Title	Hours	Sequencing
CON-862	Blueprint Reading for Construction	162	Semester 1, Fall
ARE-863	3D Tour - VR, AR, MR and XR	117	Semester 2, Spring

Elective Courses: <u>0</u> hours

Course	Title	Hours	Sequencing
None			

Total Program Units: 279 hours

#### **Item 4. Master Planning**

This certificate serves our students by providing a unique educational opportunity with cutting-edge technology to a diverse group of talents in creating job opportunity for students, entrepreneurs, and professionals who need to update their skills in the field.



Title: Essentia	ıl SolidWorks			
Originator: Department: I	Farshid Mirzaei BEIT	<b>Date</b> 3/3/2022		
(Please note: Pro	College: ☐ Moreno Valley College ☐ Norco College ☐ Riverside City College (Please note: Programs are college specific. If multiple colleges wish to include this program, a separate proposal and college specific supporting documents are required.)			
TOPs Code:	0953.00 <b>CIP</b> C	Code: 15.1302		
oxtimes Certificate  Please $oxtimes$ Sho	oeing proposed as: of Completion (CDCP Eligible specify non-credit category: rt-Term Vocational lish as a Second Language	E) ☐ Certificate of Competency (CDCP Eligible) ☐ Workforce Preparation ☐ Elementary and Secondary Basic Skills		
<i>Please</i> □ Citiz □ Pare	specify non-credit category: zenship for Immigrants	Eligible; Not Submitted to State Chancellor's Office)  ☐ Health and Safety ☐ Courses for Persons with Substantial Disabilities ☐ Courses for Older Adults		
This is a:	⊠ New non-credit certificate	☐ Modification to an existing non-credit certificate		
		edit certificate, please specify the changes being made: scription, learning outcomes, courses, contact hour values, etc.)		
	gram available to a broader range of skills in the community.	of student and professionals who just need the training and		
Technical Revi	his form and the documents outl	ed Documentation ined below to your college coordinator and the District precd.edu. Please do not submit your proposal until all of		
<ul><li>☐ Evidence of</li><li>☑ Department</li><li>☐ Narrative (S)</li></ul>	nodified programs must include district-wide discipline community minutes showing approval dee following page) et Information and Analysis (Formation and Analysis (Formation)			



In2019,therewere2,184combineddraftingjobsintheInlandEmpire/DesertRegion.Draftingoccupationsareexpectedt ohave235annualjobopenings,risingby7%.Exhibit1displays the job counts, five-year projected job growth, job openings, and the share of incumbent workers age 55 years and greater working in the drafting occupational group. (Attached report)



#### **Program Narrative**

#### Item 1. Program Goals and Objectives

*Upon successful completion of the course, students should be able to demonstrate the following activities:* 

- 1. Prepare parametric three-dimensional solid models
- 2. Prepare drawings such as orthographic and auxiliary views, sections with annotations and details using SolidWorks.
- 3. Prepare virtual rendering for mechanical parts, assemblies and animation using SolidWorks.

#### **Item 2. Catalog Description**

The Essential SolidWorks program prepares students with the knowledge and skill in using Solidworks to document mechanical drawings per ANSI standards. Students learn to render parts and assemblies with exploded view animation.

#### **Item 3. Program Requirements**

Software is free to student. Computer and software access will be provided by college. Students may use their home computer for homework.

Required Courses: 216 hours

Course	Title	Hours	Sequencing
DFT/ENE-842	SolidWorks I	108	Semester 1, Fall
DFT/ENE-842B	SolidWorks II	108	Semester 2, Spring

Elective Courses: <u>0</u> hours

Course	Title	Hours	Sequencing
None			

Total Program Units: 216 hours

#### **Item 4. Master Planning**

This certificate serves our students by providing a unique educational opportunity with SolidWorks to a diverse group of talents in creating job opportunity for students, entrepreneurs and professionals who need to update their skills in the Mechanical or Industrial drafting field.



## RIVERSIDE COMMUNITY COLLEGE DISTRICT Program Outline of Record — **Non-Credit Certificates**

<b>Title:</b> Essential Fusion 360	
Originator: Farshid Mirzaei Department: BEIT	<b>Date</b> 3/3/2022
· ·	Norco College
<b>TOPs Code:</b> 0953.00 <b>CIP Code:</b> 50.	0404
Certificate is being proposed as:  ☑ Certificate of Completion (CDCP Eligible	) ☐ Certificate of Competency (CDCP Eligible)
Please specify non-credit category:	☐ Workforce Preparation
☐ English as a Second Language	☐ Elementary and Secondary Basic Skills
_ English as a second Earlywage	_ Elomontary and secondary Busto sinns
□ Local Non-Credit Certificate (Not CDCP l	Eligible; Not Submitted to State Chancellor's Office)
Please specify non-credit category:	
☐ Citizenship for Immigrants	☐ Health and Safety
☐ Parenting	☐ Courses for Persons with Substantial Disabilities
☐ Home Economics	☐ Courses for Older Adults
This is a:   New non-credit certificate	☐ Modification to an existing non-credit certificate
	edit certificate, please specify the changes being made: scription, learning outcomes, courses, contact hour values, etc.)
Rationale: To make this program available to a broader range increase the level of skills in the community.	of student and professionals who just need the training and
Please submit this form and the documents outli	d Documentation ined below to your college coordinator and the District precd.edu. Please do not submit your proposal until all of
All new and modified programs must include  □ Evidence of district-wide discipline communi  □ Department minutes showing approval  □ Narrative (See following page)  □ Labor Market Information and Analysis (For Attached	



In2019,therewere2,184combineddraftingjobsintheInlandEmpire/DesertRegion.Draftingoccupationsareexpectedt ohave235annualjobopenings,risingby7%.Exhibit1displays the job counts, five-year projected job growth, job openings, and the share of incumbent workers age 55 years and greater working in the drafting occupational group. (Attached report)



#### **Program Narrative**

#### Item 1. Program Goals and Objectives

Upon successful completion of the course, students should be able to demonstrate the following activities:

- 1. Prepare parametric three-dimensional solid models using Autodesk 360.
- 2. Prepare drawings such as orthographic and auxiliary views, sections with standard annotation and details using Fusion 360
- 3. Setup and build parts using additive and subtractive process through Fusion 360.

#### **Item 2. Catalog Description**

The Essential Fusion 360 program prepares makers with the knowledge and skill in using Fusion360 to document mechanical drawings per ANSI standards. Students learn to render parts and assemblies with exploded view animation. Also, students learn to build parts using additive and subtractive process through Fusion 360.

#### **Item 3. Program Requirements**

Software is free to student. Computer and software access will be provided by college. Students may use their home computer for homework.

Required Courses: 234 hours

Course	Title	Hours	Sequencing
DFT-862	Basic Fusion 360	117	Semester 1, Fall
DFT-863	Advanced Fusion 360	117	Semester 2, Spring

Elective Courses: <u>0</u> hours

Course	Title	Hours	Sequencing
None			

Total Program Units: 234 hours

#### **Item 4. Master Planning**

This certificate serves our students by providing a unique educational opportunity with Fusion 360 to a diverse group of talents in creating job opportunity for students, entrepreneurs and professionals who need to update their skills in the Mechanical and industrial drafting field.



Title: Essentia	al CAD	
Originator: Department:	Farshid Mirzaei BEIT	<b>Date</b> 3/3/2022
(Please note: Pr		forco College
TOPs Code:	0953.00 <b>CIP Code:</b> 15.	1302
<b>⊠</b> Certificate <i>Please</i>	peing proposed as: of Completion (CDCP Eligible) specify non-credit category: ort-Term Vocational	☐ Certificate of Competency (CDCP Eligible) ☐ Workforce Preparation
	lish as a Second Language	☐ Elementary and Secondary Basic Skills
Please □ Citi □ Pare	specify non-credit category: zenship for Immigrants	☐ Health and Safety ☐ Courses for Persons with Substantial Disabilities ☐ Courses for Older Adults
This is a:		☐ Modification to an existing non-credit certificate
		dit certificate, please specify the changes being made: ecription, learning outcomes, courses, contact hour values, etc.)
•	ogram available to a broader range of skills in the community.	of student and professionals who just need the training and
Technical Revi	this form and the documents outli	d Documentation ned below to your college coordinator and the District precd.edu. Please do not submit your proposal until all of
☐ Evidence of ☐ Department ☐ Narrative (S	nodified programs must include f district-wide discipline commun minutes showing approval fee following page) tet Information and Analysis (For	
Attached	,	



In2019,therewere2,184combineddraftingjobsintheInlandEmpire/DesertRegion.Draftingoccupationsareexpectedt ohave235annualjobopenings,risingby7%.Exhibit1displays the job counts, five-year projected job growth, job openings, and the share of incumbent workers age 55 years and greater working in the drafting occupational group. (Attached report)



#### **Program Narrative**

#### Item 1. Program Goals and Objectives

*Upon successful completion of the course, students should be able to demonstrate the following activities:* 

- 1. Prepare Two- and three-dimensional Computer Aided Design drawings and models.
- 2. Prepare drawings such as orthographic and auxiliary views, sections with standard annotation and details using a CAD program
- 3. Prepare virtual rendering for computer models using CAD program.

#### **Item 2. Catalog Description**

This program prepares students with the knowledge and skill in using CAD to prepare complicated twoand three-dimensional geometric shapes and models used in Architecture and Mechanical industry. Students learn to render computer models and prepare CAD animation.

#### **Item 3. Program Requirements**

Software is free to student. Computer and software access will be provided by college. Students may use their home computer for homework.

Required Courses: 216 hours

Course	Title	Hours	Sequencing
DFT/ENE-830	Computer Aided Design	108	Semester 1, Fall
DFT-831	Advanced Computer Aided Design	108	Semester 2, Spring

Elective Courses: 0 hours

Course	Title	Hours	Sequencing
None			

Total Program Units: <u>216</u> hours

#### **Item 4. Master Planning**

This certificate serves our students by providing a unique educational opportunity with AutoCAD to a diverse group of talents in creating job opportunity for students, entrepreneurs and professionals who need to update their skills in the Mechanical or Industrial drafting field.



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

Title: Elementary	y Teacher Education (AA887/A	AA888)	
(Please note: ADTs ar	eno Valley College \( \subseteq \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	orco College wish to adopt this	☐ Riverside City College program, a separate proposal and
TOPs Code: 490	1.20 <b>CIP Code</b> :	13.0101	
Type of ADT: Transfer		nsfer	☐ Associate in Science for
This is a:	□ New ADT	$\boxtimes$ M	odification to an existing ADT
	cation to an existing ADT, pleased, and 5 to the Art History (AHS) acron		changes being made:
Rationale: Updating ART courses	s to AHS course discipline.		
	Required Documents outlined Review committee via TechRevi	l below to you	_
	f the documentation below is con		
All new and modi	fied ADTs must include the fol	lowing:	
☑ Discipline and I	Department minutes showing app	oroval	
■ Narrative (See ne	ext page)		
□ Completed Char	ncellor's Office Template (TMC	(Must be most	current version available)
☑ C-ID or ASSIS	$\Gamma$ Articulation Information, as re-	quired by the	ΓMC (Work with your Articulation
Officer to obtain this d	locumentation)		

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

#### **Program Narrative**

#### **Item 1. Program Goals and Objectives**

This degree is designed to facilitate students transferring to the California State University System with an Associate Degree in Elementary Teacher Education. With this degree, the student will be prepared to enter into a bachelor's degree Program designed to prepare them to teach in a K-8 classroom. This option prepares students for transfer to CSU to major in either a General Track Liberal Studies Program or an Integrated Liberal Studies/Multiple Subject Teaching Credential Program.

#### **Item 2. Catalog Description**

The Associate of Arts in Elementary Teacher Education for Transfer (AA-T) offers lower division coursework examining content area subject matter requirements for teaching at the elementary school level. Students will explore the core principles and practices of a liberal studies curriculum in order to build a foundation appropriate for entry into advanced study in teacher preparation. The students also have the opportunity to participate in supervised fieldwork in K-8 settings.

This degree is designed to facilitate students transferring to the California State University System with an Associate Degree in Elementary Teacher Education. With this degree, the student will be prepared to enter into a bachelor's degree Program designed to prepare them to teach in a K-8 classroom. This option prepares students for transfer to CSU to major in either a General Track Liberal Studies Program or an Integrated Liberal Studies/Multiple Subject Teaching Credential Program.

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

- Demonstrate knowledge of professional standards, ethics, and professionalism in elementary education classrooms to meet the diverse needs of students.
- Demonstrate an understanding of historical influences, current trends, theories, and educational issues in a global context.
- Demonstrate introductory subject matter competency for the Multiple Subject California Subject Examination for Teachers (CSET).

Required Courses: 56 units

Course	Title	Units
EDU-1	Introduction to Elementary Classroom Teaching	4
EAR-20*	Child Growth and Development	3
BIO-1/1H*	General Biology / Honors	4
CHE-2A*	Introductory Chemistry I	4
PHY-10*	Introduction to General Physics	3
PHY-11*	Physics Lab	1
GEO-4	Earth Science for Educators	4



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

MAT-26*	Math for Elementary School Teachers	4
COM-1/1H*	Public Speaking/Honors	3
ENG-1A/1AH*	English Composition/Honors	4
ENG-1B/1BH*	Critical Thinking and Writing/Honors	4
GEG-3*	World Regional Geography	3
HIS-1*	World History to 1500	3
HIS-6/6H*	United States History to 1877/Honors United States	History to 1877 3
POL-1/1H*	American Politics/Honors	3

## List A: <u>4</u> units Choose one course from the following:

Course	Title	Units
ENG-1B/1BH*	Critical Thinking and Writing/Honors	4

List B: 3 units Choose one course from the following:

Course	Title	Units
AHS-1/1H*	History of Western Art: Prehistoric, Ancient, and Medieval/Honors	3
AHS-2/2H*	History of Western Art: Renaissance through Contemporary/Honors History of Western Art: Renaissance through Contemporary	3
AHS-5*	Arts of Africa, Oceania, and Indigenous North America	3
ART-6/6H* Or AHS-6/6H	Art Appreciation	3
MUS-19*	Music Appreciation	3
THE-3*	Introduction to Theatre	3

#### List C: Choose from any course not used above or one of the following. 0-3 units

Course	Title	Units
HES-1*	Health Science	3

#### **Associate in Arts for Transfer Degree**

The Associate in Arts in Elementary T eacher Education 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 OF RECORD NEW DEGREE

College: R

#### Associate of Arts Degree in Education, Human Development & Special Needs

#### SHORT DESCRIPTION OF PROGRAM

The Associate of Arts in Education, Human Development and Special Needs offers lower division coursework that provides an introduction to issues, policies, and practices of education, with an emphasis on special education. Students will build a foundation appropriate for entry into advanced study in education, including educational research, educational advocacy, public policy, and/or teacher preparation. The students also have the opportunity to participate in supervised fieldwork in K-8 settings.

This degree is designed to facilitate students transferring to the University of California, Riverside with an Associate Degree in Education, Human Development & Special Needs. With this degree, the student will be prepared to enter into the Education, Society and Human Development BA program. In this program, students are able to follow a general plan; specialize in Community Leadership, Policy, and Social Justice; or develop their own custom program of study.

#### PROGRAM LEARNING OUTCOMES

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

- Demonstrate an understanding of historical influences, current trends, theories, and educational issues in a global context.
- Demonstrate knowledge of professional standards, ethics, and professionalism in classrooms and school visits and implement established observation and visitation protocols within schools.
- Identify laws and regulations pertaining to and protecting children with disabilities and other special needs in education and community settings.
- Describe the process of accessing community agencies, referral systems and procedures for specialized support, specialized documents, resources and placement options.

Required Courses		Units
EDU-10	Introduction to Education Studies	3
EAR-40	Introduction to Children with Special Needs	3
EAR-43	Children with Challenging Behaviors	3
EAR-47	Childhood Stress and Trauma	3
EDU-1	Introduction to Elementary Classroom Teaching	4
EAR-20	Child Growth and Development	3
ENG-1A/1AH	English Composition	4
ENG-1B/1BH	Critical Thinking and Writing	4
MUS 89/89H	Music of Multicultural America	3
HUM 16	Arts and Ideas: American Culture	3
SOC 10/ <mark>10H</mark>	Race and Ethnic Relations	3
POL 1/1H	American Politics	3
GEG 1/1H	Physical Geography	3
BIO 1/1H	General Biology	4
HES 1	Health Science	3
COM 1/ <mark>1H</mark>	Public Speaking	3
Choose one of the fo	ollowing:	
MAT 12/12H	Statistics	4
PSY/SOC 48	Statistics for the Behavioral Sciences	3
or		
MAT 26	Math for Elementary School Teachers	4
Choose one of the fo	ollowing:	
HIS 1*	History of World Civilizations I	3
or		

HIS 2/2H\* History of World Civilizations II

3 58/59 1-3 units

UC/CSU Elective Course (Must have 60 transferable units for transfer)

The Associate in Arts in Education, Human Development and Special Needs degree will be awarded upon completion of 60 transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC) with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better. (Students completing this degree are not required to fulfill the RCCD graduation requirements found in section VII. Additional degree requirements: Health Education and Self Development).



Title: Dental Assistant		
	☐ <b>Norco College</b> rtificates are college specific. If multiple and college specific supporting document	
<b>TOPs Code:</b> 1240.10	CIP Code: 51.0601	
Type of Program:  ☐ Certificate of Achievement ☐ Associate Degree only	only ☐ Locally approved certif ☐ Certificate of Achiever	ficate (8-units or less) only ment <u>and</u> Degree
Type of Associate Degree:	☐ Associate of Arts	
This is a: ☐ New certifi	icate/degree   Modification to	o an existing certificate/degree
(Please be specific! Indicate any 1. The total number of unit 2. The words "quality and "Provide a quality and equitable National Certification Exam (CDA program goals will remain unchar 3. Program learning outco  Rationale: (Please note: This information will increase from 1.5 to 2.0.) 2. The verbiage in program better integration and si	and California State Registered Dental inged.  Some #4 "Apply self-assessment skills to provide the presented to the Board of Trustees, ssary as one of the courses, DEA-41 Dental in goal 2 is being changed to better reflect upport of the institution's goals and missione #4 will be deleted as the program is a this post-graduation.	atcomes, courses, unit values, etc.) for the program. for the program. for the program goal to read: at the student to successfully complete the Assistant Exam (RDA). "The remaining romote lifelong learning "will be deleted."  Ital Office Management, had a 0.5 unit the program's mission along with a ion.  The transfer of the measure and assess if the
All Degrees and Certificates		
	iscipline communication – N/A	
☐ Department minutes showing Department Minutes Showing Department Minutes Showing Page 1 Department Minutes Showing Page 1 Department Minutes Showing Department Minutes Showing Page 1 Department Minutes Showi		
☐ Transfer preparation docum		



#### 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.) - Temporarily will receive draft Advisory Minutes.

☑ 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 program prepares individuals to provide patient care, take dental radiographs (x-rays), prepare patients and equipment for dental procedures as well as discharge office administrative functions under the supervision of dentists. The curriculum includes instructions in dental office management tasks, general office duties, reception and patient intake, patient scheduling, equipment maintenance and sterilization, dental radiography and radiation safety, pre and post-operative patient care and instructions, chairside assisting and direct patient care in general and specialty practice, taking impressions, infection control, Dental Practice Act, pit and fissure sealant application, coronal polish and supervised clinical practice

#### **PROGRAM GOALS**

- Maintain compliance with the Commission on Dental Accreditation and the Dental Practice Act of California
- Provide a quality and equitable dental assistant curriculum that prepares the student to successfully complete the National Certification Exam (CDA) and California State Registered Dental Assistant Exam (RDA).
- Maintain proficient dental assistant faculty and staff to ensure a high-quality educational program.
- Prepare the student for dental assisting employment as an integral member of the dental health team

#### PROGRAM LEARNING OUTCOMES

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

- Collect diagnostic data and perform clinical supportive treatments as outlined by the State Dental Practice Act
- Perform business office procedures as related to dental practices
- Adhere to the ADAA's Code of Ethical Conduct and apply this to established ethical, legal and regulatory concepts for dental assisting
- Demonstrate interpersonal and communication skills to effectively interact with diverse populations

#### **Item 2. Catalog Description**

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

#### <u>PROGRAM PREREQUISITE</u>



#### Qualification for ENG-1A SHORT DESCRIPTION of PROGRAM

The program prepares individuals to provide patient care, take dental radiographs (x-rays), prepare patients and equipment for dental procedures as well as discharge office administrative functions under the supervision of dentists. The curriculum includes instructions in dental office management tasks, general office duties, reception and patient intake, patient scheduling, equipment maintenance and sterilization, dental radiography and radiation safety, pre and post—operative patient care and instructions, chair-side assisting and direct patient care in general and specialty practice, taking impressions, infection control, Dental Practice Act, pit and fissure sealant application, coronal polish and supervised clinical practice.

#### PROGRAM LEARNING OUTCOMES

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

- Collect diagnostic data and perform clinical supportive treatments as outlined by the State Dental Practice Act
- Perform business office procedures as related to dental practices
- Adhere to the ADAA's Code of Ethical Conduct and apply this to established ethical, legal and regulatory concepts for dental assisting
- Demonstrate interpersonal and communication skills to effectively interact with diverse populations

#### **Item 3. Program Requirements**

Required Courses: 33 units

Course	Title	Units	Sequencing
DEA-10	Introduction to Dental Assisting and Chairside Assisting	4.5	Semester 1, Fall
DEA-20	Infection Control for Dental Assistants	2	Semester 1, Fall
DEA-21	Introduction to Radiology for Dental Assistants	2.5	Semester 1, Fall
DEA-22	Introduction to Supervised Externships	1.5	Semester 1, Fall
DEA-23	Introduction to Dental Sciences	3	Semester 1, Fall
DEA-24	Dental Materials for the Dental Assistant	2	Semester 1, Fall
DEA-30	Intermediate Chairside Dental Assisting	2	Winter Intersession
DEA-31	Radiology for Dental Assistants	1	Winter Intersession
DEA-32	Intermediate Supervised Externships	1	Winter Intersession
DEA-40A	Advanced Chairside Surgical Dental Assistant	3.5	Semester 2, Spring
DEA-40B	Advanced Chairside Orthodontic Dental Assistant	2	Semester 2, Spring
DEA-40C	Advanced Chairside Restorative Dental Assistant	6	Semester 2, Spring
DEA-41	Dental Office Management	2	Semester 2, Spring

Total: 33 Units



Minimum Degree Units		Maximum Degree Units	
Minimum Required Units	33	Maximum Required Units	33
Minimum Elective Units	0	Maximum Elective Units	0
Local GE Required Units	0	CSUGE Required Units	0
Double Counted Units	0	Double Counted Units	0
Total Minimum Degree Units	60	Total Maximum Degree Units	60

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

#### **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 Moreno Valley College Dental Assistant Program provides the students with a quality, equitable education that prepares them to be highly competent, professional, and caring licensed dental assistants. Our graduates go on to serve the dental community and community at large by working in various dental offices in the region. This fits in and aligns with the institution's mission to educate and empower students, to provide equitable access to education and serve the community.

#### **Item 5. Enrollment and Completer Projections**

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

The Moreno Valley College Dental Assistant program can graduate up to 24 students annually. The cohort size is limited by accreditation and state requirements.

#### Item 6. Place of Program in Curriculum/Similar Programs

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

The program is part of Health Human and Public Services Department.

#### Item 7. Similar Programs at Other Colleges in Service Area

Justification of need for certificate/degree in the region.

The Moreno Valley College Dental Assistant Program is one of the two community college programs in the region with Chaffey College being the other. The environmental scan shows a high demand for dental assistants with a 14% increase in employment, and 808 job openings annually for the next five years.

#### Item 8. Transfer Preparation Information (if applicable) – N/A



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