

SANTA ANA COLLEGE

CURRICULUM & INSTRUCTION COUNCIL

DATE: November 13, 2007

FROM: Bonnie Jaros, Chair

TO: Curriculum & Instruction Council

RE: Minutes of Meeting of November 5, 2007
2:00 pm, Santa Ana College B-33

Present: J. Acuña, B. Birnbaum, M. Brown, P. Canzona, C. Carrera, B. Choo, D. Dobos, N. Fujimoto, Y. Garcia, G. Giroux, J. Howe, M. Huebsch, P. Hughes, D. Kanzler, K. Patterson, R. Robledo, K. Ross, S. Sotelo, M. Tran, S. Valdez, S. Whelan.

Guests: M. Collins, V. Garcia, S. Garnett, G. Gilreath, J. Houser, M. Porter, E. Ripley, K. Simmons.

1. MINUTES OF MEETING OF OCTOBER 22, 2007. The minutes of the meeting of October 22, 2007 were approved as submitted.
2. TECHNICAL COMMITTEE REPORT. The Technical Committee report was approved as submitted.
3. CURRICULUM ITEMS. See attachment.
4. POLICY CHANGE-SECOND READING-GENERAL EDUCATION REQUIREMENTS FOR THE ASSOCIATE DEGREE. It was moved, seconded, and carried to approve the request to change Sign Language 111B to Sign Language 111 in Category C of the General Education Requirements for the Associate Degree.
5. POLICY CHANGE-SECOND READING-GENERAL EDUCATION BREADTH REQUIREMENTS FOR THE CALIFORNIA STATE UNIVERSITIES. It was moved, seconded, and carried to approve the request to add Sign Language 111 to Category C2 of the General Education Breadth Requirements for the California State Universities.
6. POLICY CHANGE-SECOND READING-INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM. It was moved, seconded, and carried to approve the request to

add Sign Language 111 to Area 3 of the Intersegmental General Education Transfer Curriculum.

7. POLICY CHANGE-FIRST READING-GENERAL EDUCATION REQUIREMENTS FOR THE ASSOCIATE DEGREE. The request to add Exercise Science Off Season 130, 132AB, 169, 226, 230, 261, 262, 280 and 290 to Category F2 of the General Education Requirements for the Associate Degree was a first reading only.
8. POLICY CHANGE-FIRST READING-GENERAL EDUCATION REQUIREMENTS FOR THE ASSOCIATE DEGREE. The request to add “Successful completion of any Reading course at the 100 level” and delete “Successful completion of Reading 100A” from Category IV- A3 of the General Education Requirements for the Associate Degree was a first reading only.
9. POLICY CHANGE-FIRST READING-GENERAL EDUCATION REQUIREMENTS FOR THE ASSOCIATE DEGREE. The request to add Reading 102 and 150 to Category E2 of the General Education Requirements for the Associate Degree was a first reading only.
10. POLICY CHANGE-FIRST READING-GENERAL EDUCATION BREADTH REQUIREMENTS FOR THE CALIFORNIA STATE UNIVERSITIES. The request to add Reading 150 to the Category A3 of the General Education Breadth Requirements for the California State Universities was a first reading only.
11. POLICY CHANGE-FIRST READING-GENERAL EDUCATION BREADTH REQUIREMENTS FOR THE CALIFORNIA STATE UNIVERSITIES. The request to add Biology 200 to the Category B2 of the General Education Breadth Requirements for the California State Universities was a first reading only.
12. POLICY CHANGE-FIRST READING-INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM. The request to add Biology 200 to Area 5B of the Intersegmental General Education Transfer Curriculum was a first reading only.
13. POLICY CHANGE-FIRST READING-GENERAL EDUCATION BREADTH REQUIREMENTS FOR THE CALIFORNIA STATE UNIVERSITIES. The request to add Environmental Studies 200 to the Category B2 of the General Education Breadth Requirements for the California State Universities was a first reading only.
14. POLICY CHANGE-FIRST READING-INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM. The request to add Environmental Studies 200 to Area 5B of the Intersegmental General Education Transfer Curriculum was a first reading only.
15. POLICY CHANGE-FIRST READING-GENERAL EDUCATION BREADTH REQUIREMENTS FOR THE CALIFORNIA STATE UNIVERSITIES. The request to add Science 200 to the Category B2 of the General Education Breadth Requirements for the California State Universities was a first reading only.

16. POLICY CHANGE-FIRST READING-INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM. The request to add Science 200 to Area 5B of the Intersegmental General Education Transfer Curriculum was a first reading only.

17. OTHER.

A) Program-level SLOs – The Teaching Learning Committee (TLC) is reviewing SLOs at the program level; the Institutional Effectiveness and Assessment Committee (IE&A) is reviewing SLOs at the institutional level within context of the Educational Master Plan.

B) Assessment on the Course Outline Record (COR) – The TLC will develop a template to address the assessment section of the COR. Faculty development sessions will be held to discuss how to address assessment within the Department Portfolios and the COR.

ADDENDUM TO THE AGENDA

1. TECHNICAL COMMITTEE REPORT. The Technical Committee report was approved except that item #1 was pulled.

2. CURRICULUM ITEMS.

NEW COURSES-FIRST READING

Items #1, 4, 5 through 10 were pulled. Items #2, 3, 11 and 12 were presented for first reading only.

Continuing Education

1. Counseling 305, Supervised Tutoring
2. Secondary Subjects High School Subjects-Science 170, Biology 1A Lab Science
3. Secondary Subjects High School Subjects-Science 171, Biology 1B Lab Science
4. Substantial Disabilities 400, Developmentally Disabled Adults Job Coach Training
5. Vocational Business 096, Introduction to Use of Digital Cameras
6. Vocational Business 102, Introduction to Adobe InDesign
7. Vocational Business 275, Introduction to Office Employment Training Program
8. Vocational Business 277, Introduction to Income Tax Basics
9. Vocational Business 278, Introduction to Creating a Website Using Dreamweaver
10. Vocational Business 279, Introduction to Database Management with Microsoft Excel
11. Parent Education 528, Increasing Parent Awareness of U.S. Schools
12. Parent Education 533, Seminar in Parent Education

REVISED COURSES-FIRST READING

Items #13 through 35 were presented for first reading only.

Continuing Education

13. Parent Education 527, Pre-Kindergarten “Parent and Me” Training
14. Parent Education 532, Effective Parenting

15. Parent Education 558, Early Childhood Care and Development for Family Child Care Providers
16. Parent Education 562, Health Education for Family Care Providers
17. Secondary Subjects High School Subjects 032, Individualized Instruction
18. Substantial Disabilities 350, Signing Exact English for Parents of Deaf Children
19. Substantial Disabilities 494, Disabilities & Success in the Workforce
20. Substantial Disabilities 495, Personal Development & Grooming for Developmentally Disabled Adults
21. Substantial Disabilities 781, Basic Academic Skills for Adults with Developmental Disabilities
22. Substantial Disabilities 787, Employment Preparation for Developmentally Disabled Adults
23. Substantial Disabilities 788, Independent Living Skills for Developmentally Disabled Adults
24. Substantial Disabilities 793, Physical Activities for Adults with Developmental Disabilities
25. Vocational Business 109, Introduction to Desktop Video Editing Using Adobe Premiere
26. Vocational Business 117, Introduction to Document Processing Using Adobe Acrobat
27. Vocational Business 120, Introduction to Animations Using Flash
28. Vocational Business 242, Introduction to Vector Graphics Using Adobe Illustrator
29. Vocational Business 260, Introduction to Word Processing Using MS Word
30. Vocational Business 261, Introduction to Database Using Filemaker Pro
31. Vocational Business 262, Introduction to Spreadsheets Using MS Excel
32. Vocational Business 302, Introduction to Web Page Development Using HTML
33. Vocational Business 303, Introduction to Electronic Imaging Using Adobe Photoshop
34. Vocational Business 304, Introduction to Electronic Presentations Using PowerPoint
35. Vocational Business 590, Introduction on How to Start a Small Business

The next meeting is Monday, November 19th, at 2 p.m., SAC B-33.

NEW COURSES-SECOND READING

Items #1 through 11 were pulled.

Continuing Education

1. Vocational Business 264, Payroll Records and Procedures
2. Vocational Business 266, File Management with Microsoft Windows XP
3. Vocational Business 267, Desktop Publishing and Web Design with Microsoft Word
4. Vocational Business 269, Newsletter Design with Microsoft Publisher
5. Vocational Business 270, Introduction to Microsoft Access
6. Vocational Business 271, Accounting Fundamentals
7. Vocational Business 272, Interactive Presentations with Microsoft PowerPoint
8. Vocational Business 274, QuickBooks Pro 2003
9. Vocational Business 275, Microsoft Office Integration
10. Health and Safety 850, Emergency Planning and Safety
11. Health and Safety 879, Living Healthy Lives

Items #12 and 13 were approved except that Item #12 was approved with the removal of “Follow-up of Fashion Design Merchandising 105B” from the descriptions and the addition of “Recommended preparation Fashion Design Merchandising 105B” to the descriptions.

Human Services & Technology

12. Fashion Design Merchandising 106, Advanced Sewing
13. Fire Public Safety 043, Fire Marine Safety Basic Topics

Items #14 and 15 were approved except that Item #14 was approved with Sign Language 112 as the prerequisite.

Student Services

14. Sign Language 114, Classifiers, Fingerspelling, and Numbering
15. Special Service N44, Reading Development for the Deaf

NEW COURSES-FIRST READING

Items #16 through 41 were presented for first reading only.

Business

16. Business Applications 150, Introduction to Geographic Information Systems
17. Business Applications 151, Intermediate Geographic Information Systems
18. Business Applications 174, Creating Web Pages with Dreamweaver and Flash
19. Business Seminar 020, Workplace Boundaries
20. Business Seminar 041, Workplace Morale
21. Business Seminar 076, Fundamentals of Geographic Information Systems (GIS)
22. Business Seminar 077, PDA Essentials
23. Management 040, Professional Development – Exploring Leadership
24. Management 041, Professional Development – The Business of Show Business

Fine and Performing Arts

25. Music 155, Introduction to Pro Tools
26. Television/Video Communication 155, Introduction to Pro Tools
27. Theatre Arts 156, Readers' Theatre Workshop

Human Services

28. Fire Officer Training 007E, ICS 223-10, Wildland Line EMT
29. Fire Officer Training 012, Ethical Leadership
30. Fire Officer Training 078, S-230 Crew Boss (Single Resource)
31. Fire Officer Training 078A, S-130 Firefighter Training – Wildland
32. Fire Officer Training 078B, S-215L Urban Wildland Interface Firefighting
33. Fire Officer Training 078C, S-371 Helibase Manager
34. Fire Public Safety 044, Fire Marine Rescue – Advanced Topics

Humanities

35. Reading 094, Preparation for Nursing ATI Test – Reading
36. Reading 102, Academic Reading
37. Reading 150, Critical Reading

Technology

38. Automotive Technology 025, A-6 Alternative Course – Electrical Systems
39. Automotive Technology 033, A-8 Alternative Course – Engine Performance
40. Automotive Technology 086, Advanced Clean Air Car Course
41. Automotive Technology 087, L-1 Alternative Course: Advanced Engine Performance

REVISED COURSES-SECOND READING

Items #42 through 125 were approved.

Business

42. Small Business Seminar 012, Business Financing and Recordkeeping

Human Services

43. Criminal Justice Academies 005A, Patrol Rifle Course
44. Criminal Justice Academies 007, Tactics Covert & Crisis Entry
45. Criminal Justice Academies 009A, Special Weapons & Tactics Team Update
46. Criminal Justice Academies 010A, Physical Fitness for Peace Officers
47. Criminal Justice Academies N25, Occult Crimes Investigations
48. Criminal Justice Academies 042, ACT Instructor Course
49. Criminal Justice Academies 053, Low Light Tactical Shotgun and Handgun Training
50. Criminal Justice Academies 068, Jail Security for Records Clerk and Matron
51. Criminal Justice Academies N81, Tactical Firearms Update
52. Criminal Justice Academies 088, Campus Law Enforcement Update
53. Fashion Design Merchandising 057, Patterns for Dressmakers
54. Fashion Design Merchandising 102, Promotion and Coordination
55. Fashion Design Merchandising 109, Pattern Design

56. Fashion Design Merchandising 113, Fashion Draping
57. Fire Academy 007, Orientation and Physical Fitness
58. Fire Academy 008C, Intermediate Physical Ability Training
59. Fire Academy 008D, Advanced Physical Ability Training
60. Fire Academy 009, Basic Wellness & Fitness Assessment for Public Safety Personnel
61. Fire Academy 031, Fire Specialist Academy, Vehicle Rescue and Extrication
62. Fire Academy 033, Swift Water Rescue
63. Fire Academy 035, Confined Space Rescue: Operational
64. Fire Academy 041A, Reserve Firefighter Academy
65. Fire Academy 050, Fire Suppression Training Academy
66. Fire Academy 060, Basic Fire Academy
67. Fire Academy 061, Basic Fire Academy Validation
68. Fire Academy 062, Basic Incident Command Systems
69. Fire Academy 062B, ICS-300 Intermediate ICS
70. Fire Academy 062C, ICS-400 Incident Command
71. Fire Academy 063C, HERS – Heavy Rigging and Equipment Specialist
72. Fire Academy 231A, Fire Prevention Officer 1A
73. Fire Academy 231B, Fire Prevention Officer 1B
74. Fire Academy 231C, Fire Prevention Officer 1C
75. Fire Academy 232A, Fire Prevention Officer 2A
76. Fire Academy 232B, Fire Prevention Officer 2B
77. Fire Academy 232C, Fire Prevention Officer 2C: Special Hazard Occupancies
78. Fire Academy 233A, Fire Prevention 3A
79. Fire Academy 233B, Fire Prevention Officer 3B
80. Fire Academy 241A, Fire Instructor 1A
81. Fire Academy 241B, Fire Instructor 1B
82. Fire Academy 242A, Fire Instructor 2A
83. Fire Academy 242B, Fire Instructor 2B
84. Fire Academy 242C, Fire Instructor 2C
85. Fire Academy 243, Fire Instructor 3 (Master Instructor)
86. Fire Academy 251A, Fire Investigation 1A
87. Fire Academy 251B, Fire Investigation 1B
88. Fire Academy 252A, Fire Investigation 2A
89. Fire Academy 252B, Fire Investigation 2B
90. Fire Academy 261, Fire Management I
91. Fire Academy 262B, Fire Management 2B: Financial Management
92. Fire Academy 262C, Fire Management 2C, Personnel and Labor Relations
93. Fire Academy 262D, Fire Management 2D, Master Planning
94. Fire Academy 271A, Fire Command 1A
95. Fire Academy 271B, Fire Command 1B
96. Fire Academy 272A, Fire Command 2A, Command Tactics at Major Fires
97. Fire Academy 272B, Fire Command 2B, Management of Major Hazardous Materials Incidents
98. Fire Officer Training 016, CSFA Terrorism
99. Fire Officer Training 017, Fire Control 5
100. Fire Officer Training 018, Ground Safety and Survival

101. Fire Officer Training 020A, Hazardous Materials 1A
102. Fire Officer Training 020B, Hazardous Materials 1B
103. Fire Officer Training 020C, Hazardous Materials 1C
104. Fire Officer Training 085B, Paramedic Continuing Education
105. Fire Public Safety 060, Career Firefighter County Academy
106. Human Development 298A, Practicum in Early Childhood Programs
107. Human Development 298B, Practicum in Infant/Toddler Programs
108. Pharmacy Technology 056, Pharmacy Operations
109. Pharmacy Technology 060, Sterile Products

Humanities

110. Chicano Studies 101, Introduction to Chicano Studies

Social Sciences

111. History 146, African American History from 1863 to the Present

Student Services

112. Sign Language 110, American Sign Language I
113. Sign Language 111, American Sign Language II
114. Sign Language 112, American Sign Language III
115. Sign Language 113, Introduction to Interpreting for the Deaf
116. Sign Language 116, Perspective on Deafness

Technology

117. Diesel 052, Truck & Trailer Refrigeration Unit Preventive Maintenance
118. Diesel 068, Transit Vehicle Engines
119. Diesel 069, Paratransit Driver Training
120. Diesel 070, Bus Driver Training
121. Diesel 071, Introduction to Coach Operations
122. Diesel 075, Transit Vehicle Automatic Transmissions
123. Diesel 077, Transit Vehicle Heating, Ventilation, Air Conditioning
124. Diesel 078, Transit Vehicle Drive Train Suspension
125. Diesel 080, Transit Vehicle Air Brake Systems

REVISED COURSES-FIRST READING

Items #126 through 207 were presented for first reading only.

Business

126. Business 150, Introduction to Information Systems and Applications

Continuing Education

127. Adult Basic Education 111, Spanish Literacy for Adults
128. English as a Second Language 038, Vocational ESL: Business Skills
129. English as a Second Language 060, Vocational ESL: Health Services
130. English as a Second Language 393, Introduction to ESL/Family Literacy

131. English as a Second Language 394, ESL Writing A
132. English as a Second Language 395, ESL Writing B
133. English as a Second Language 398, ESL Community Learning Center
134. English as a Second Language 510, Vocational ESL: English for Work 1
135. English as a Second Language 520, Vocational ESL: English for Work 2
136. English as a Second Language 530, American English Pronunciation
137. Secondary Subjects High School Subjects-English 065, English Fundamentals 1
138. Secondary Subjects High School Subjects-English 066, English Fundamentals 2
139. Secondary Subjects High School Subjects-English 067, English Fundamentals 3
140. Secondary Subjects High School Subjects-English 068, English Fundamentals 4
141. Secondary Subjects High School Subjects-English 097, Building Vocabulary 2
142. Secondary Subjects High School Subjects-English 601, American English Pronunciation C
143. Secondary Subjects High School Subjects-Mathematics 163, Algebra 1A
144. Secondary Subjects High School Subjects-Mathematics 164, Algebra 1B
145. Secondary Subjects High School Subjects-Mathematics 165, Algebra 2A
146. Secondary Subjects High School Subjects-Mathematics 166, Algebra 2B
147. Secondary Subjects High School Subjects-Mathematics 167, Geometry A
148. Secondary Subjects High School Subjects-Mathematics 168, Geometry B
149. Secondary Subjects High School Subjects-Social Science 218, U.S. History 1
150. Secondary Subjects High School Subjects-Social Science 219, U.S. History 2
151. Secondary Subjects High School Subjects-Social Science 222, Government 1: United States Federal Government and Politics

Exercise Science

152. Exercise Science Intercollegiate Athletics 126, Upper Body Development for Athletes-Men
153. Exercise Science Intercollegiate Athletics 127, Lower Body Development for Athletes-Men

Human Services

154. Criminal Justice Academies 002A, Report Writing Update
155. Criminal Justice Academies 005, Shotgun Course – 8 Hour
156. Criminal Justice Academies 006, Level III Reserve Academy
157. Criminal Justice Academies 008, Street Gangs
158. Criminal Justice Academies N26, Law Enforcement CPR/First Aid
159. Criminal Justice Academies 033, Mounted Units
160. Criminal Justice Academies 033A, Advanced Mounted Officer Tactics
161. Criminal Justice Academies 034, Hostile Work Environment Training
162. Criminal Justice Academies 077, Tactical Firearms Update
163. Criminal Justice Academies 086, Career Ethics/Integrity
164. Criminal Justice Academies 087, Driving/Force Option Simulator Training
165. Fashion Design Merchandising 112, Pattern Drafting
166. Fire Academy 008B, Beginning Physical Ability Training
167. Fire Academy 071A, Ventilation Review
168. Fire Academy 072, Emergency Trench Shoring
169. Fire Academy 076, Low Angle Rope Rescue
170. Fire Academy 079A, Division/Group Supervisor

171. Fire Academy 079B, S-330 Task Force-Strike Leader
172. Fire Academy 080A, S-234 Wildland Firing Methods and Procedures
173. Fire Academy 080D, S-290 Intermediate Wildland Fire Behavior
174. Fire Academy 084, Hazardous Materials First Responder
175. Fire Academy 084A, First Responder 'Operational' Decontamination
176. Fire Academy 088, City Emergency Response Team
177. Fire Academy 200, Fire Public Education Officer I
178. Fire Academy 262A, Fire Management 2A, Leadership and Effective Communication
179. Fire Academy 262E, Fire Management 2E, Contemporary Issues and Concepts
180. Fire Academy 271C, Fire Command 1C
181. Fire Academy 272C, Fire Command 2C, High Rise Fire Tactics
182. Fire Academy 272D, Fire Command 2D, Planning for Large Scale Disasters
183. Fire Academy 273B, Command 2E, Wildland Firefighter Tactics
184. Fire Officer Training 006D, CSFM Terrorism and RIC
185. Fire Officer Training 010, Career Firefighter Lateral Academy
186. Fire Officer Training 020D, Hazardous Materials 1D
187. Fire Officer Training 079B, S-231 Engine Boss
188. Fire Officer Training 079C, S-330 Task Force-Strike Team Leader
189. Human Development 111A, Principles and Practices of Teaching Young Children
190. Human Development 111B, Introduction to Curriculum for Young Children
191. Human Development 221, Teaching in a Diverse Society
192. Human Development 231, Developing Language and Literacy in Young Children
193. Occupational Therapy Assistant 101L, Exploration of Occupation Through Activity
194. Occupational Therapy Assistant 102L, Psychosocial Components of Occupation
195. Occupational Therapy Assistant 103L, Physical Components of Occupation
196. Pharmacy 084, Sterile Products Update

Humanities

197. English N60, Basic of Effective Writing
198. English 061, Introduction to Composition
199. English as a Second English N40A, Introduction to Academic ESL I
200. English as a Second English N40B, Introduction to Academic ESL II

Science and Math

201. Chemistry 219H, Honors General Chemistry
202. Mathematics 219H, Honors Statistics and Probability
203. Mathematics 295, Beginning Differential Equations

Social Sciences

204. Social Science 219H, Honors Statistics and Probability

Technology

205. Diesel 072, Transit Vehicle Electrical Systems
206. Diesel 073, Transit Vehicle Air Systems
207. Diesel 079, Transit Vehicle Wheelchair Lifts

NEW PROGRAM-SECOND READING

Item #208 was approved.

Technology

208. Manufacturing Technology – Solidworks 3D Solid Modeling Certificate

PROGRAM REVISION-SECOND READING

Items #209 through 224 were approved.

Human Services

- 209. Fire Technology – Administrative Fire Services Chief Officer Degree (1508) and Certificate (2598)
- 210. Fire Technology – Administrative Fire Services Communications Degree (1507)
- 211. Fire Technology – Fire Administration Option Degree (0643) and Certificate (2494)
- 212. Fire Technology – Fire Technology Medical Services Officer Option Degree (0641)
- 213. Fire Technology – Fire Technology Medical Services Officer Option Certificate (2692)
- 214. Fire Technology – Prevention Officer Degree (0657)
- 215. Fire Technology – Prevention Officer Certificate (2693)
- 216. Fire Technology – Hazardous Materials Option Degree (0103)
- 217. Fire Technology – Hazardous Materials Option Certificate (2691)
- 218. Fire Technology – Public Fire Safety Education Officer Option Degree (0644)
- 219. Fire Technology – Public Fire Safety Education Officer Option Certificate (2694)
- 220. Fire Technology – Training Officer Option Degree (0104)
- 221. Fire Technology – Training Officer Option Certificate (2195)
- 222. Pharmacy Technology Degree and Certificate

Student Services

223. American Sign Language Certificate

Technology

224. Diesel and Heavy Equipment Technology Degree (0274) and Certificate (0295)

PROGRAM REVISION-FIRST READING

Items #225 through 243 were presented for first reading only.

Exercise Science

- 225. Exercise Science Degree (0459)
- 226. Exercise Science Fitness Certificate (2496)
- 227. Exercise Science Sports Medicine Certificate (2499)

Human Services

- 228. Criminal Justice – Criminal Justice Options Degree (0617)
- 229. Fashion Merchandising Degree (0556) and Certificate (0397)

- 230. Fashion Design and Custom Clothing Degree (0801) and Certificate (0596)
- 231. Fashion Design and Custom Clothing – Apparel Production Technician Option Degree (0100) and Certificate (0897)
- 232. Fashion Design and Custom Clothing – Dressmaking and Alterations Option Certificate (1092)
- 233. Infant-Toddler Option Degree (0639) and Certificate (1394)
- 234. Preschool Child Option Degree (0645) and Certificate (0692)
- 235. Occupational Therapy Assistant (0583)

Technology

- 236. Automotive Technology Degree (0272)
- 237. Manufacturing Technology
- 238. Manufacturing Technology – CAD/CAM Option Degree (1059) and Certificate (2092)
- 239. Manufacturing Technology – CNC Lathe Set Up and Operation Option Degree (0465) and Certificate (2595)
- 240. Manufacturing Technology – CNC Machine Set Up and Operation Option Degree (0463) and Certificate (2309)
- 241. Manufacturing Technology – CNC Milling Machine Set Up and Option Degree (0467) and Certificate (2597)
- 242. Manufacturing Technology – CNC Programmer A-Mastercam Option Degree (0462) and Certificate (2299)
- 243. Manufacturing Technology – Conventional Machining Option Degree (1061) and Certificate (2095)