UNIVERSITY OF HAWAI'I
MEMORANDUM OF AGREEMENT

HONOLULU COMMUNITY COLLEGE
UNIVERSITY OF HAWAI'I-WEST O'AHU

BACHELOR OF APPLIED SCIENCE
CONCENTRATION IN COMPUTING, ELECTRONICS, AND
NETWORKING TECHNOLOGY

The purpose of this degree pathway is to facilitate a smooth transition for students entering Honolulu Community College or the University of Hawai'i-West O'ahu as they work towards obtaining the Bachelor of Applied Science (BAS) degree with a concentration in Computing, Electronics, and Networking Technology (CENT). This pathway is designed to produce multiple entry and exit points to flexibly serve student career and educational objectives. In particular, this Agreement will facilitate the transfer of students in the Associate in Science (AS) in the Computing, Electronics, and Networking Technology (CENT) Program or the Advanced Professional Certificate in CENT, at Honolulu Community College (HON) to the Bachelor of Applied Science with a concentration in CENT at the University of Hawai'i-West O'ahu (UHWO).

Under the terms of this Agreement, the University of Hawai'i-West O'ahu agrees to:
- Identify a Student Services Advisor(s) at UHWO who will partner with HON's advisor(s) to ensure timely and accurate advising information on pre-admission, admission, degree requirements, and other related advising information.
- Identify a UWHO faculty member who will serve as the faculty advisor to students in the CENT concentration.
- Meet with HON faculty and/or administration on an annual, or as needed basis, to discuss potential and planned curricular changes.

Under the terms of this Agreement, Honolulu Community College agrees to:
- Identify a program counselor at HON who will partner with UHWO advisor(s) to ensure timely and accurate advising information on pre-admission, admission, degree requirements, and other relevant advising information.
- Identify a HON faculty member who will serve as the faculty advisor to students in the CENT Concentration and consult with UHWO's admissions personnel on students on an as needed basis.
- Meet with UHWO faculty and/or administration on an annual, or as needed basis, to discuss potential and planned curricular changes,
• Begin discussions with UHWO on dual enrollment processes to benefit the matriculation and transfer processes for CENT students

This Agreement will be reviewed as necessary, in order to support the transfer, matriculation and graduation of CENT students from both UHWO and Honolulu CC.

Gene I. Awakuni, Chancellor

Linda Randall, Vice-Chancellor for Academic Affairs

Lynn Hodgson
Professor and Chair of Math and Natural Science

David Pai, Assistant Professor
Business Administration

Mike Rota, Acting Chancellor

Erika Lacro, Vice-Chancellor for Academic Affairs

Aaron Tanaka
Professor, CC

Sally Dunan,
Assistant Professor, CENT

Date of Agreement: __ __ __ __ __ __ __

AUG 24 2009

Rev: 02.08.08
Bachelor of Applied Science with a Concentration in Computing, Electronics, and Networking Technology

**Bachelor of Applied Science core coursework 15 credits**:  
3 ENG 200 Composition II or Engl 210 or 215  
3 PUBA/Busa 481 Ethics and Administration  
3 SSCI 301 Methods and Techniques in Social Science Research  
3 PUBA 341 Statistics for Decision-Making in Public Administration; BUSA 320 Statistics for Decision-Making; or SSCI 210 Applied Statistics I [Math 103 is pre-requisite BUSA 320 and SSCI 210]  
3 BAS 486/490 Senior Project/Administrative Practicum

**CENT lower-division coursework 45-46 credits**:  
(Honolulu CC's AS degree CENT, with selected electives for the BAS)  
4 CENT 110 Introduction to Information Systems  
4 CENT 130 Microcomputer Operating Systems  
4 CENT 131 Microcomputer Hardware I  
4 CENT 140 Computer Networking I  
4 CENT 228 System Administration and Networking with TCP/IP  
3-4 CENT course elective  
1 FAMR 100 Personal & Professional Development  
4 ICS 111 Computer Science I -- or equivalent

**CENT concentration coursework 23 or 24 credits**:  
4 CENT 305 Information Systems Security  
4 CENT 310 Network Security  
4 CENT 315 Network Administration  
Note: These 3 also count toward an "Advanced Professional Certificate". Student must be enrolled at UHWO, in order to get financial aid for these courses.  
4 CENT 410 Project Management, WI  
7-8 CENT Technology Electives from the following lists:

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1. BAS Computer Literacy requirement is waived based on overall computer competencies with the CENT concentration  
2. ENG 200 must be taken at UHWO in order to meet UHWO minimum 30 credit requirement for graduation. If ENG 200 or equivalent is taken at HON, an alternate course must be taken at UHWO.  
3. Note: if lower-division CENT and/or ICS coursework is taken in this category, student must still meet minimum 45 credit upper-division requirements for graduation.
Information Networking: CENT 231 Data Communications (until Fall 2009 when it becomes a core course); CENT 235 IP Communications; CENT 240 Computer Networking II; CENT 340 Advanced Routing; CENT 345 Multilayer Switching; CENT 360 Network Security II

System Administration: CENT 232 PC Desktop and Printer Support; CENT 300 Systems Analysis & Design; CENT 351 UNIX System Administration II; CENT 370 Integrated Network Applications; CENT 372 Network Operating Systems II; CENT 390 Special Topics in CENT; CENT 399 Special Studies; ICS 211 Computer Science II

Upper-division restricted electives 12-14 credits:

Management Information Systems: BUSA 332 Contemporary Business Issues; BUSA 345 Management Information Systems

Business: BUSA 310 Concepts in Accounting [may soon be replaced in the evolving accounting program]; BUSA 321 Business Finance; BUSA 324 Business Law

Management/Administration: BUSA 435 Strategic Planning; BUSA 462 Disaster Recovery & Business Continuity; PUBA 301 Health Care Administration; PUBA 302 Health Policy, Politics and Law; PUBA 306 Principles of Public Administration; PUBA 313 Communication Skills for Administrators [Oral focus]; BUSA/PUBA 480 Organizational Behavior [Psych 100 pre-requisite]

CENT Technical Electives at the 300 level (up to 8 credits, so long as student meets the 30 hours of UHWO residence credits.)
Graduation Requirement: 45 credits of upper-division coursework

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSCI 301</td>
<td>Methods and Techniques in Social Science Research</td>
<td>3</td>
</tr>
</tbody>
</table>

Statistics

  [Note SSCI 210 Applied Statistics I is a statistics option for BAS students, but students using that option will need an additional 3 credits upper division work]

- PUBA/BUSA 481 Ethics and Administration                       | 3       |
- BAS 486/490 Senior Project/Administrative Practicum           | 3       |
- CENT 305 Information Systems Security                         | 4       |
- CENT 310 Network Security                                     | 4       |
- CENT 315 Network Administration                               | 4       |
- CENT 410 Project Management                                   | 3       |
- CENT electives Information Networking and/or System Administration | 7-8†   |
- UHWO electives Restricted or technical electives at the upper-division level | 12-14   |
  (or upper division CENT electives up to 8 credits)

**Total upper-division credits: 46-50**

†Note: if student takes lower-division CENT electives, student must still complete the minimum 45 credit upper-division requirement.

Graduation Requirement: UHWO 30 credits

<table>
<thead>
<tr>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 200*</td>
<td>Composition II (or an equivalent course)</td>
<td>3</td>
</tr>
<tr>
<td>SSCI 301</td>
<td>Methods and Techniques in Social Science Research</td>
<td>3</td>
</tr>
</tbody>
</table>

Statistics


- PUBA/BUSA 481 Ethics and Administration                       | 3       |
- BAS 486/490 Senior Project/Administrative Practicum           | 3       |
- CENT 410 Project Management                                   | 3       |
- UHWO electives Restricted electives at the upper-division level | 6-12    |
- UHWO General education courses as alternatives for additional upper-division technical electives | 6-0     |

**Total UHWO credits: 30**

*Note: if student completes ENG 200 or equivalent at HON, then 3 credits of diversification social science or another general education course will be taken at UH
General Education coursework requirements 28 credits:

FW 3 ENG 100 Composition I
FS 3 MATH from the following list: 103 College Algebra; 135 Pre-calculus: Elementary Functions; 140 Pre-calculus: Trigonometry and Analytic Geometry; or higher level math
FG 6 HIST 151 World Civilizations I and HIST 152 World Civilizations II or other FG options
DB 3 any course designated Diversification Biological
DP/DY 4 PHYS 131 Electricity, Magnetism, and Optics or Phys 100/100L.
DS 3 any coursework designated Diversification Social Sciences (total 6 credits required for DS: SSCI 301 Methods & Techniques of Social Science Research already accounted for as part of BAS core and General Education DS)

DH, DA, or DL 6 HWST 107 Hawai'i: Center of the Pacific [H focus]; SP 151 Personal and Public Speech or SP 251 Principles of Effective Speaking [or PubA 313 for O-focus]

Total credits: 127 credits

4 Foundations Multi-cultural global perspectives may be completed with any 6 credits from two different groups designated FGA, FGB, FGC
5 Students who entered CENT prior to Fall 2008 should consult with their academic advisors on the completion of DP/DY credit.
6 Diversification Humanities, Arts, or Literature may be completed with any course designated DH, DA, or DL, with two different groups represented. Students should consult with academic advisors for course selections regarding O and H focus.
Attachment II

Coursework utilized for Graduation, General Education and/or Focus Requirements

General Education Summary 31 credits:
Recommended courses

Foundations:
Written Communication (FW): ENG 100 Composition I\(^7\)
[Note: ENG 200 is a graduation requirement for UHWO]
Symbolic Reasoning (FS): MATH 103 College Algebra; 135 Pre-calculus:
Elementary Functions; 140 Pre-calculus:
Trigonometry and Analytic Geometry; or
higher level math

Global & Multi-cultural Perspectives: HIST 151 and 152 World Civilizations I and II
(or from 2 groups: FGA, FGB, FGC) or Anth 151,152, Geog 102

Diversification:
Humanities, Arts, or Literature: (DH, DA, or DL)
HWST 107 Hawai‘i: Center of the Pacific;
SP 151 Personal and Public Speaking or
SP 251 Principles of Effective Speaking

Social Sciences (DS):
SSCI 301 Methods and Techniques in Social Science
Research; three credits of any DS designated course

Biological Sciences (DB):
any course designated DB by catalog description

Physical Sciences (DP) and Science Lab (DY):
PHYS 131 Electricity, Magnetism, and Optics
(PHYS 131 is a 4 credit class which includes a lab
designated DY); or Phys 100 with lab

Focus Requirements:
Oral Communication (O):
SP 151 Personal and Public Speaking or
SP 251 Principle of Effective Speaking or
PubAd 313 Communication Skills for Administrators

Ethics (E):
PUBA/BUSA 481 Ethics and Administration

Hawaiian, Asian, Pacific (H):
HWST 107 Hawai‘i: Center of the Pacific

Writing-Intensive (WI):
Nine credits at the upper-division level,
with no more than three credits from capstone
(BAS 486/490)

\(^7\) ENG 200 must be taken at UHWO in order to meet the UHWO minimum 30 credit requirement. If ENG 200 or equivalent is taken at HON, a DS course must be taken at UHWO.