## Lake Superior State University—Articulation Agreement

## **Bay de Noc Community College**

Transfer Major: Bachelor of Science-Robotics Engineering Jillena Rose, Transfer & Student Advising Bay de Noc Community College 906/217.4047 or jillena.rose@baycollege.edu Bay College Admissions 906/786.5802 Contacts Fall 2023 - Fall 2026 Valid: Heidi Rife, Director of LSSU Regional Center Lake Superior State University 906/217.4123 or hrife@lssu.edu LSSU Admissions 888/800.5778 x:2231

Michigan Transfer Agreement (MTA)   STUDENTS EARN MTA AT BAY COLLEGE   REQUIREMENTS	Bay College Courses	LSSU Equivalency	Additional LSSU Courses
REQUIREMENTS CSCI120 Principles of Programming 4 ELEC130 Circuit Fundamentals 4 ELEC170 Digital I Fundamentals 4 ELEC240 Real Time Robotics Sys 4 ELEC290 Intro Programmable Logic 4 ELEC290 Intro Programmable Logic 4 EGRS215 Intro to Robotics 2+(2**) MATH142 Analytical Geo & Calc III 5 MATH243 Analytical Geo & Calc III 5 MATH244 Differential Equations 3 PHYS206 Engineering Physics II 5 PHYS206 Statics 3 ELECTIVES (to reach min. 124 cr) 0-5 Students must have six technical electives for degree. If taken at Bay College, these courses must transfer to LSSU as described in "Additional LSSU Courses" column. Suggestions on back.  REQUIREMENTS EGRS245 C Programming 3+1 EGRS430 Sys Integ. & Machine Vision 4 EGRS436 Automated Mig Systems 3 EGRS460 Control Systems 4 EGRS436 Program. Logic Control. 3+(1**) EGRS365 Program. Logic Control. 3+(1**) EGRS365 Program. Logic Control. 3+(1**) EGRS365 Program. Logic Control. 3+(1**) EGRS460 Verifical Equations 3 Intro to Robotics 2+(2**) EGRS460 Verifical Equations 3+(1**) EGRS460 Verifical Equations 4+(1**) EGRS460 Verifical Equations 3+(1**) EGRS460 Verifical Equations 4+(1**) EGRS46	ENGL101 Rhetoric and Composition 3 XXXXxxx Communication Elective 3 MATH141 Analytical Geo & Calc I 5 CHEM110 General Chemistry I 5 PHYS205 Engineering Physics I 5 XXXXxxx Social & Behav. Science 6	ENGL110 First-Year Composition I 3  XXXXxxx Communications Elective 3  MATH151 Calculus 1 4+(1**)  CHEM115 General Chemistry 5  PHYS231 App Phy Engineer Scientist I 4+(1**)  XXXXxxx Social & Behav. Science 6	EGME141 Solid Modeling 3 EGNR101 Intro to Engineering 2 EGNR140 Linear Alg / Num Methods 2 EGNR340 Num Methods for Engineers 1 EGRS105 Robotics Apps & Trends 1 EGRS305 Robotics Safety & Collab. 3 EGRS372 Mobile Robotics 4
**Additional Credits applied to free electives  TECHNICAL ELECTIVE (min 6 credits 0-6 Students must have six technical electives for degree. If taken at Bay College, these courses must transfer to LSSU as described in "Additional LSSU Courses" column. Suggestions on back.  SUPPORT ELECTIVE (min. 3 credits) 0-2 Students must have three support electives for degree. If taken at Bay College, these courses must transfer to LSSU as described in "Additional LSSU Courses" column. Suggestions on back.  *Additional Credits applied to free electives  TECHNICAL ELECTIVE (min. 6 credits) 0-6 CSCI281 or 1; EGEE250 or 1; EGMT216; EGNR261 or 1; or EGRS461  SUPPORT ELECTIVE (min. 3 credits) 0-2 *Additional credit above for Calculus 3 counts as a support elective.  *UPPORT ELECTIVE (min. 3 credits) 0-2 *Additional credit above for Calculus 3 counts as a support elective.  *UPPORT ELECTIVE (min. 3 credits) 0-2 *Additional credit above for Calculus 3 counts as a support elective.  *UPPORT ELECTIVE (min. 3 credits) 0-2 *Additional credit above for Calculus 3 counts as a support elective.  *Additional Credits applied to free electives  TECHNICAL ELECTIVE (min. 6 credits) 0-6 CSCI281 or 1; EGEE250 or 1; EGMT216; EGNR261 or 1; or EGRS461  SUPPORT ELECTIVE (min. 3 credits) 0-2 *Additional credit above for Calculus 3 counts as a support elective.  *Additional Credits applied to free electives	CSCI120 Principles of Programming 4 ELEC130 Circuit Fundamentals I 4 ELEC170 Digital I Fundamentals 4 ELEC240 Real Time Robotics Sys 4 ELEC290 Intro Programmable Logic 4 MATH142 Analytical Geo & Calc II 5 MATH243 Analytical Geo & Calc III 5 MATH244 Differential Equations 3 PHYS206 Engineering Physics II 5	EGNR265         C Programming         3+1           EGEE210         Circuit Analysis         4           EGEE125         Digital Fundamentals         4           EGRS215         Intro to Robotics         2+(2**)           EGRS365         Program. Logic Control.         3+(1**)           MATH152         Calculus II         4+(1**)           MATH251         Calculus III         4+(1*)           MATH310         Differential Equations         3           PHYS232         App Phy Engineer Scientist II 4+(1**)	EGRS430 Sys Integ. & Machine Vision 4 EGRS435 Automated Mfg Systems 3 EGRS460 Control Systems 4 MATH308 Prob & Math Statistics 3  SENIOR YEAR EXPERIENCE (Select 1) 6-13 Industrial: EGNR491 & 495 Cooperative: EGNR250, 450, 451, & 491
Students must have six technical electives for degree. If taken at Bay College, these courses must transfer to LSSU as described in "Additional LSSU Courses" column. Suggestions on back.  SUPPORT ELECTIVE (min. 3 credits) 0-2 Students must have three support electives for degree. If taken at Bay College, these courses must transfer to LSSU as described in "Additional LSSU Courses" column. Suggestions on back.  SUPPORT ELECTIVE (min. 3 credits) 0-2 *Additional credit above for Calculus 3 counts as a support elective.  SUPPORT ELECTIVE (min. 3 credits) 0-2 *BUSN231 or 1; CSCI201 or 1; ECON302 or 1; EGME110; MATH215 or 1; MGMT280 or 1; or additional Technical Electives			ELECTIVES (to reach min. 124 cr) 0-5
Students must have three support electives for degree. If taken at Bay College, these courses must transfer to LSSU as described in "Additional LSSU Courses" column. Suggestions on back.  *Additional credit above for Calculus 3 counts as a support elective.  *Additional credit above for Calculus 3 counts as a support elective.  BUSN231 or 1; CSCI201 or 1; ECON302 or 1; or additional Technical Electives	Students must have six technical electives for degree. If taken at Bay College, these courses must transfer to LSSU as described in "Additional"	TECHNICAL ELECTIVE (min. 6 credits) 0-6	CSCI281 or 1; EGEE250 or 1; EGEM320; EGET310; EGME225 or 1; EGMT216;
	Students must have three support electives for degree. If taken at Bay College, these courses must transfer to LSSU as described in "Additional"	*Additional credit above for Calculus 3 counts as a	BUSN231 or $\uparrow$ ; CSCI201 or $\uparrow$ ; ECON302 or $\uparrow$ ; EGME110; MATH215 or $\uparrow$ ; MGMT280 or $\uparrow$ ;

9/11/2023

Ms. Mindy McCready (Date) Ms. Mingy McCready

LSSU Interim Dean of the College of Innovation and Solutions

9/12/23 Dr. Kimberly Muller (Date)

LSSU Interim Provost & VP of Academic Affairs

Jessica Van Slooten

TOTAL CREDITS

ollege Deamof Arts & Sciences

Min. 124

## Lake Superior State University—Articulation Agreement Bay de Noc Community College Transfer Major: Bachelor of Science-Robotics Engineering, Page 2 **Bay College Courses** LSSU Equivalency Additional LSSU Courses NOTES FROM PAGE 1: TECHNICAL ELECTIVE (min 6 credits 0-6 | TECHNICAL ELECTIVE (min. 6 credits) 0-6 TECHNICAL ELECTIVE (min. 6 credits) 0-6 Students must have six technical electives for CSCI281 or ↑; EGEE250 or ↑; EGEM320; degree. If taken at Bay College, these courses EGET310; EGME225 or ↑; EGMT216; must transfer to LSSU as described in "Additional EGNR261 or 1; or EGRS461 LSSU Courses" column. Suggestions: CNSS220 Network Design AND CSCI323 Routers and Switches 3+5 CNSS225 Wireless Systems 4 CNSS231 Advanced Linux CSCI281 Intro to UNIX and Networking 4 3+1 PHYS261 Dynamics 3 EGEM320 Dynamics 3 SUPPORT ELECTIVE (min. 3 credits) 0-3 |SUPPORT ELECTIVE (min. 3 credits) SUPPORT ELECTIVE (min. 3 credits) 0-3 Students must have three support electives for \*Additional credit above for Calculus 3 counts as a BUSN231 or 1; CSCI201 or 1; ECON302 or 1; degree. If taken at Bay College, these courses support elective. EGME110; MATH215 or ↑; MGMT280 or ↑; must transfer to LSSU as described in "Additional or additional Technical Electives LSSU Courses" column. Suggestions: BUSN195 Business Communications BUSN231 Business Communications 3 BUSN203 Management Info Systems 3 MGMT280 Intro Mgmt Info Systems 3 BUSN250 Business Law I BUSN350 Business Law I 3 CIS140 Database Applications CSCI211 Database Applications 3 CNSS130 Intro to Networks CSCI221 4 Computer Networks 3+1 CNSS220 Network Design 4 CSCI277 Electives 4 CNSS225 Wireless Systems 4 CSCI277 Electives 4 CNSS230 Intro to Unix Using Linux 4 CSCI277 Electives 4 CNSS245 SQL Server 4 CSCI277 Electives 4 CNSS260 Network Security CSCI263 Managing Comp Security 3+1 MATH250 Linear Algebra MATH305 Linear Algebra 3 3 Note: Students will earn Bay's A.S. Pre-Engineering upon successful completion of the courses listed in blue. Consult with a Bay advisor. B.S. Note: 30 credits from Mathematics and Natural Sciences is required.

Transfer guides are for planning purposes only and are subject to change without notice.

Final responsibility for verifying all transfer information lies with the student; a transfer guide is not intended to be a contract with LSSU. Sub/waiver forms will need to be written for Bay's CSCI121 to LSSU's EGNR265; EGNR101 will be waived for transfer students

Consultation with an advisor is recommended.

For more course to course equivalencies visit www.lssu.edu/equivalency