New York City College of Technology, CUNY

CURRICULUM MODIFICATION PROPOSAL FORM

This form is used for all curriculum modification proposals. See the [Proposal Classification Chart](http://openlab.citytech.cuny.edu/collegecouncil/files/2014/08/2013-10-09-Proposal_Classification_Chart.pdf) for information about what types of modifications are major or minor. Completed proposals should be emailed to the Curriculum Committee chair.

|  |  |
| --- | --- |
| **Title of Proposal** | **Bachelor of Technology with Strengthened Areas of Focus** |
| **Date** | **October 25, 2018** |
| **Major or Minor** | **Major** |
| **Proposer’s Name** | **Alexander Aptekar** |
| **Department** | **Architectural Technology** |
| **Date of Departmental Meeting in which proposal was approved** | **October 18, 2018** |
| **Department Chair Name** | **Sanjive Vaidya** |
| **Department Chair Signature and Date** |  |
| **Academic Dean Name** | **Kevin Hom** |
| **Academic Dean Signature and Date** |  |
| **Brief Description of Proposal**  (Describe the modifications contained within this proposal in a succinct summary. More detailed content will be provided in the proposal body. | To provide for a more focused BTech degree this proposal provides the option for students to take 2 electives in place of one of the currently required 6th or 7th semester studios -- ARCH 3612 Architectural Design VI, ARCH 3630 (Advanced Detailing Studio), or ARCH 4712 (Architectural Design Vll). The proposal also includes a change of contact hours for ARCH 3630 (Advanced Detailing Studio), and changes in the prerequisites for ARCH 3550 (Building Performance Workshop). |
| **Brief Rationale for Proposal**  (Provide a concise summary of why this proposed change is important to the department. More detailed content will be provided in the proposal body). | These changes will strengthen the ability of the BTech students to focus their studies on areas of building technology. Among the focuses that these changes help facilitate include Computation/Fabrication, Sustainability & Resiliency, and Building Science & Technology. These changes will also differentiate the BTech and BArch degree students strengthening both the degrees.  A change in requirements in ARCH 3550 (Building Performance Workshop) will enable students to take the class as designed. The prerequisite ARCH 3670 was moved forward in the curriculum in May 2018. To align ARCH 3550 requirements with students learning paths a different prerequisite is being proposed. |
| **Proposal History**  (Please provide history of this proposal: is this a resubmission? An updated version? This may most easily be expressed as a list). | The BTech changes have been under development by the department, since the department began the process of creating the new five-year Bachelor of Architecture degree. It has been understood by the department and the department’s advisors that these BTech changes will be introduced after the BArch program begins to function. (The current fourth semester students may be eligible for the BArch program)  First introduced (October 18, 2018) and this third version date (March 30th, 2019) |

**ALL PROPOSAL CHECK LIST**

|  |  |
| --- | --- |
| Completed CURRICULUM MODIFICATION FORM including: |  |
| * Brief description of proposal | √ |
| * Rationale for proposal | √ |
| * Date of department meeting approving the modification | √ |
| * Chair’s Signature |  |
| * Dean’s Signature |  |
| Evidence of consultation with affected departments  List of the programs that use this course as required or elective, and courses that use this as a prerequisite. | n/a |
| Documentation of Advisory Commission views (if applicable). | n/a |
| Completed [Chancellor’s Report Form](http://openlab.citytech.cuny.edu/collegecouncil/files/2014/08/2013-10-09-Chancellor_Report_Quick_Reference_Guide1.doc). | √ |

**EXISTING PROGRAM MODIFICATION PROPOSALS**

|  |  |
| --- | --- |
| Documentation indicating core curriculum requirements have been met for new programs/options or program changes. | √ |
| Detailed rationale for each modification (this includes minor modifications) | √ |

## Changes in Degree Programs

## Appendix H: CHANCELLOR’S UNIVERSITY REPORT DOCUMENTS

[“Section AIII: Changes in Degree” of the Programs Chancellor’s Report Forms]

The following revisions are proposed for the   
BACHELOR OF TECHNOLOGY IN ARCHITECTURAL TECHNOLOGY

|  |  |
| --- | --- |
| **FROM:** | **TO:** |
| **BTech candidates must complete the existing AAS in  ARCHITECTURAL TECHNOLOGY**  **PROGRAM-SPECIFIC DEGREE REQUIREMENTS 29-~~31~~**  BACCALAUREATE-LEVEL COURSES  ARCH 3512 Architectural Design V 5  ARCH 3522 History of New York City Architecture Met as GenEd / BTech Elective 3  ARCH 3612 Architectural Design Vl: Advanced Design  **or**  ~~ARCH 3630 Advanced Detailing Studio 5~~  ARCH 4712 Architectural Design Vll: Urban Design 5  ~~ARCH 4740 Detail and Construction Technologies for~~  ~~Existing Buildings 3~~  ARCH 4812 Architectural Design Vlll: Integrative Design  **or**  ARCH 4830 Construction Technology: Special Topics 5  ARCH 4861 Professional Practice 3  ARCH 3531 Building Technology IV 3  ARCH 3670 Building Systems 3  **ELECTIVE COURSES IN THE MAJOR  (BTECH ELECTIVE)** **3-~~6~~**  (no changes)  ELECTIVES  ARCH 3550 Building Performance Workshop 3  ARCH 3551 Sustainability: History and Practice 3  ARCH 3570 Lighting and Acoustics 3  ARCH 3590  Parametric Computation, Materials Fabrication 3 ARCH 3591  Computer assisted Architectural Animation 3  ARCH 3609  Integrated Software in the Architectural Office 3 ARCH 3631 Advance Material Workshop 3  ARCH 3640 Historic Preservation  Theory and Practice 3 ARCH 3662  Government Regulations and Approvals 3 ARCH 3690  Intermediate Computation and Fabrication 3  ARCH 3691 Advanced Design and Building Information Modeling 3  ARCH 3900 Study Abroad 3  ARCH 4400 Special Topics in Architecture 3  ARCH 4709  Advanced 3D Modeling and Rendering 3  ARCH 4740  Detail and Construction of Existing Buildings 3  ARCH 4750  Advanced Simulation for High Performance Buildings 3  ARCH 4780 Case Studies in Structural Engineering 3  ARCH 4791 Advanced Design and Building Information Modeling and Integrated Project Delivery 3  ARCH 4831 Design To Build 3  ARCH 4890 Computation and  Fabrication: Performative Architecture 3  ARCH 4900 Internship in Architectural Technology 3  MAT 1475 Calculus I 4  FMGT 3620 Building Systems I 3  FMGT 4720 Building Systems II 3  FMGT 4780 Programming and  Introduction to Space Planning 3  Students may use the following upper-level studios for elective credit with ~~department approval:~~  ~~ARCH 3610 Design VI~~ ~~5~~  ARCH 3630 Advanced Detailing 5  ~~ARCH 4810 Design VIII~~ ~~5~~  ARCH 4830  Construction Technology: Special Topics 5  Students may select one elective course outside the major to replace a BTech elective, with department approval.  **TOTAL PROGRAM-SPECIFIC REQUIRED  AND ELECTIVE COURSES** **78**  **TOTAL NYSED LIBERAL ARTS  AND SCIENCE CREDITS** **42**  **TOTAL CREDITS REQUIRED FOR THE DEGREE 120**  For progression in and graduation from this Architectural Technology program, a minimum grade of “C” is required in the following courses in the major: all required Design and Construction Technology Studios (ARCH 1112, ARCH 1212, ARCH 2312, ARCH 2412, ARCH 3512, ARCH 3612, ARCH 3630, ARCH 4712, ARCH 4812 and ARCH 4830), and all required Visual Studies (ARCH 1191, ARCH 1291) and Building Technology courses (ARCH 1231, ARCH 2331, ARCH 2431, ARCH 3531).  Students may not enroll in multiple studios concurrently, i.e. students may enroll in only one course per semester from the following list: ARCH 3512, ARCH 3612, ARCH 3630, ARCH 4712, ARCH 4812, ARCH 4830. | **BTech candidates must complete the existing AAS in  ARCHITECTURAL TECHNOLOGY**  **PROGRAM-SPECIFIC DEGREE REQUIREMENTS 29-32**  BACCALAUREATE-LEVEL COURSES  ARCH 3512 Architectural Design V 5  ARCH 3522 History of New York City Architecture Met as GenEd / BTech Elective 3  ARCH 3612 Architectural Design Vl: Advanced Design 5  **and / or**  ARCH 4712 Architectural Design Vll: Urban Design 5  ARCH 4812 Architectural Design Vlll: Integrative Design  **Or**  ARCH 4830 Construction Technology: Special Topics 5  ARCH 4861 Professional Practice 3  ARCH 3531 Building Technology IV 3  ARCH 3670 Building Systems 3  **ELECTIVE COURSES IN THE MAJOR  (BTECH ELECTIVE)** **3-9**  (no changes)  ELECTIVES  ARCH 3550 Building Performance Workshop 3  ARCH 3551 Sustainability: History and Practice 3  ARCH 3570 Lighting and Acoustics 3  ARCH 3590  Parametric Computation, Materials Fabrication 3  ARCH 3591  Computer assisted Architectural Animation 3  ARCH 3609  Integrated Software in the Architectural Office 3 ARCH 3631 Advance Material Workshop 3  ARCH 3640 Historic Preservation  Theory and Practice 3 ARCH 3662  Government Regulations and Approvals 3 ARCH 3690  Intermediate Computation and Fabrication 3  ARCH 3691 Advanced Design and Building Information Modeling 3  ARCH 3900 Study Abroad 3  ARCH 4400 Special Topics in Architecture 3  ARCH 4709  Advanced 3D Modeling and Rendering 3  ARCH 4740  Detail and Construction of Existing Buildings 3  ARCH 4750  Advanced Simulation for High Performance Buildings 3  ARCH 4780 Case Studies in Structural Engineering 3  ARCH 4791 Advanced Design and Building Information Modeling and Integrated Project Delivery 3  ARCH 4831 Design To Build 3  ARCH 4890 Computation and  Fabrication: Performative Architecture 3  ARCH 4900 Internship in Architectural Technology 3  MAT 1475 Calculus I 4  FMGT 3620 Building Systems I 3  FMGT 4720 Building Systems II 3  FMGT 4780 Programming and  Introduction to Space Planning 3  Students may use the following upper-level studios for elective credit:  ARCH 3612 Architectural Design Vl:  Advanced Design 5  ARCH 3630 Advanced Detailing 5  ARCH 4712 Architectural Design Vll:  Urban Design 5  ARCH 4812 Architectural Design Vlll:  Integrative Design 5  ARCH 4830  Construction Technology: Special Topics 5  Students may select one elective course outside the major to replace a BTech elective, with department approval.  **TOTAL PROGRAM-SPECIFIC REQUIRED  AND ELECTIVE COURSES** **78**  **TOTAL NYSED LIBERAL ARTS  AND SCIENCE CREDITS** **42**  **TOTAL CREDITS REQUIRED FOR THE DEGREE 120**  For progression in and graduation from this Architectural Technology program, a minimum grade of “C” is required in the following courses in the major: all required Design and Construction Technology Studios (ARCH 1112, ARCH 1212, ARCH 2312, ARCH 2412, ARCH 3512, ARCH 3612, ARCH 3630, ARCH 4712, ARCH 4812 and ARCH 4830), and all required Visual Studies (ARCH 1191, ARCH 1291) and Building Technology courses (ARCH 1231, ARCH 2331, ARCH 2431, ARCH 3531).  Students may not enroll in multiple studios concurrently, i.e. students may enroll in only one course per semester from the following list: ARCH 3512, ARCH 3612, ARCH 3630, ARCH 4712, ARCH 4812, ARCH 4830. |

**Rationale:**

These changes are part of a strengthening and adapting of the architecture curriculum to meet the evolving requirements of the discipline. The architecture profession has been moving towards either requiring higher levels of degrees or higher levels of specialization. To address this the department is in process of introducing a five-year Bachelor of Architecture degree. [Approved by College Council on May 8, 2018, granted “Candidacy Status” by the National Architectural Accrediting Board, Final accreditation will be awarded or denied in 2023. (Students graduating the program in spring 2022 will be eligible to receive a degree if the program is awarded accreditation in 2023.] The above proposed changes will broaden the opportunity for BTech students to take elective classes that will focus on architectural technology. Technology focuses, or tracks that are available with the existing electives for BTech students include: Digital Representation, Computation/Fabrication, Preservation Technology, Sustainability & Resiliency, Project Management, and Building Science. These changes will also differentiate the BTech and BArch degree students strengthening both the degrees by allowing students to concentrate on their area of specialization with colleagues with similar areas of interest. Industry and academic advisors to the program have advocated this change to differentiate the programs during the advisement for the development of the BArch program.

**Course changes to be offered in the Architectural Technology department**

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| --- | --- | --- | --- |
| **CUNY First Course ID** | ARCH 3550 |  |  |
| **FROM:** |  | **TO:** |  |
| **Department(s)** | Architecture Technology | **Department(s)** | Architecture Technology |
| **Course** | ARCH 3550 Building Performance Workshop | **Course** | ARCH 3550 Building Performance Workshop |
| **Prerequisite** | (ARCH 1250 and ~~ARCH 3670~~) or  (CMCE 1222 and ~~CMCE 2320~~) | **Prerequisite** | (ARCH 1250 and ARCH 2431) or (CMCE 1222 and CMCE 2321) |
| **Corequisite** | none | **Corequisite** | None |
| **Pre- or corequisite** | none | **Pre- or corequisite** | None |
| **Hours** | 1 cl hr, 4 lab hrs | **Hours** | 1 cl hr, 4 lab hrs |
| **Credits** | 3 | **Credits** | 3 |
| **Description** | (no change) | **Description** | (no change) |
| **Requirement Designation** |  | **Requirement Designation** |  |
| **Liberal Arts** | [ ] Yes [ ] No | **Liberal Arts** | [ ] Yes [ ] No |
| **Course Attribute (e.g. Writing Intensive, Honors, etc** |  | **Course Attribute (e.g. Writing Intensive, Honors, etc** |  |
| **Course Applicability** | [ x] Major  [ ] Gen Ed Required  [ ] English Composition  [ ] Mathematics  [ ] Science  [ ] Gen Ed - Flexible  [ ] World Cultures  [ ] US Experience in its Diversity  [ ] Creative Expression  [ ] Individual and Society  [ ] Scientific World  [ ] Gen Ed - College Option  [ ] Speech  [ ] Interdisciplinary  [ ] Advanced Liberal Arts | **Course Applicability** | [x ] Major  [ ] Gen Ed Required  [ ] English Composition  [ ] Mathematics  [ ] Science  [ ] Gen Ed – Flexible  [ ] World Cultures  [ ] US Experience in its  Diversity  [ ] Creative Expression  [ ] Individual and Society  [ ] Scientific World  [ ] Gen Ed - College Option  [ ] Speech  [ ] Interdisciplinary  [ ] Advanced Liberal Arts |
| **Effective Term** | Spring 2019 |  |  |

**Rationale:** The change in requirements of for ARCH 3550 Building Performance Workshop will enable students to take the class as it is designed to integrate into students’ academic advancement. The prerequisite ARCH 3670 was moved forward in the curriculum to strengthen the degree offerings including the new five-year Bachelor of Architecture degree. [Approved by College Council on May 8, 2018]. To adjust to the May 8 curriculum changes it is proposed that the replacement requirement ARCH 3670 be ARCH 2431 Building Technology III.

|  |  |  |  |
| --- | --- | --- | --- |
| **CUNYFirst Course ID** | ARCH 3630 |  |  |
| **FROM:** |  | **TO:** |  |
| **Department(s)** | Architecture Technology | **Department(s)** | Architecture Technology |
| **Course** | ARCH 3630, Advanced Detailing Studio | **Course** | ARCH 3630, Advanced Detailing Studio |
| **Prerequisite** | (ARCH 3531 or ARCH 2430) and ARCH 3510, both with a grade of C or higher, and (ARCH 3580 or ARCH 2480 or ARCH 2381) | **Prerequisite** | (ARCH 3531 or ARCH 2430) and (ARCH 3510 or ARCH 3512), both with a grade of C or higher, and (ARCH 3580 or ARCH 2480 or ARCH 2381) |
| **Corequisite** | none | **Corequisite** | none |
| **Pre- or corequisite** | None | **Pre- or corequisite** | None |
| **Hours** | ~~2 cl hrs, 6 lab Hours~~ | **Hours** | 1 cl hrs, 8 lab Hours |
| **Credits** | 5 | **Credits** | 5 |
| **Description** | (no change) | **Description** | (no change) |
| **Requirement Designation** |  | **Requirement Designation** |  |
| **Liberal Arts** | [ ] Yes [ ] No | **Liberal Arts** | [ ] Yes [ ] No |
| **Course Attribute (e.g. Writing Intensive, Honors, etc** |  | **Course Attribute (e.g. Writing Intensive, Honors, etc** |  |
| **Course Applicability** | [ x] Major  [ ] Gen Ed Required  [ ] English Composition  [ ] Mathematics  [ ] Science  [ ] Gen Ed - Flexible  [ ] World Cultures  [ ] US Experience in its Diversity  [ ] Creative Expression  [ ] Individual and Society  [ ] Scientific World  [ ] Gen Ed - College Option  [ ] Speech  [ ] Interdisciplinary  [ ] Advanced Liberal Arts | **Course Applicability** | [x ] Major  [ ] Gen Ed Required  [ ] English Composition  [ ] Mathematics  [ ] Science  [ ] Gen Ed – Flexible  [ ] World Cultures  [ ] US Experience in its  Diversity  [ ] Creative Expression  [ ] Individual and Society  [ ] Scientific World  [ ] Gen Ed - College Option  [ ] Speech  [ ] Interdisciplinary  [ ] Advanced Liberal Arts |
| **Effective Term** | Spring 2019 |  |  |

**Rationale:** The modification will enrich the curriculum by allowing additional studio time for students pursue in depth investigation and application of building science concepts taught in the lecture portion of the course. This will bring the class with in line will the contact hours granted comparable studious ARCH 3612 and ARCH 4712.

|  |  |  |  |
| --- | --- | --- | --- |
| **CUNYFirst Course ID** | ARCH 4712 |  |  |
| **FROM:** |  | **TO:** |  |
| **Department(s)** | Architecture Technology | **Department(s)** | Architecture Technology |
| **Course** | ARCH 4712, Architectural Design VII: Urban Design | **Course** | ARCH 4712, Architectural Design VII: Urban Design |
| **Prerequisite** | ARCH ~~3612~~ or ARCH ~~3610~~ with a grade of C or higher | **Prerequisite** | ARCH 3512 or ARCH 3510 with a grade of C or higher |
| **Corequisite** | none | **Corequisite** | none |
| **Pre- or corequisite** | None | **Pre- or corequisite** | None |
| **Hours** | (no change) | **Hours** | (no change) |
| **Credits** | 5 | **Credits** | 5 |
| **Description** | (no change) | **Description** | (no change) |
| **Requirement Designation** |  | **Requirement Designation** |  |
| **Liberal Arts** | [ ] Yes [ ] No | **Liberal Arts** | [ ] Yes [ ] No |
| **Course Attribute (e.g. Writing Intensive, Honors, etc** |  | **Course Attribute (e.g. Writing Intensive, Honors, etc** |  |
| **Course Applicability** | [ x] Major  [ ] Gen Ed Required  [ ] English Composition  [ ] Mathematics  [ ] Science  [ ] Gen Ed - Flexible  [ ] World Cultures  [ ] US Experience in its Diversity  [ ] Creative Expression  [ ] Individual and Society  [ ] Scientific World  [ ] Gen Ed - College Option  [ ] Speech  [ ] Interdisciplinary  [ ] Advanced Liberal Arts | **Course Applicability** | [x ] Major  [ ] Gen Ed Required  [ ] English Composition  [ ] Mathematics  [ ] Science  [ ] Gen Ed – Flexible  [ ] World Cultures  [ ] US Experience in its  Diversity  [ ] Creative Expression  [ ] Individual and Society  [ ] Scientific World  [ ] Gen Ed - College Option  [ ] Speech  [ ] Interdisciplinary  [ ] Advanced Liberal Arts |
| **Effective Term** | Spring 2019 |  |  |

**Rationale:** The modification will allow for students to focus their BTech studies by giving them the option of taking architecture classes that focus on technology. The changes will also facilitate a broader selection of options for students to complete their degree sequence.

|  |  |  |  |
| --- | --- | --- | --- |
| **CUNYFirst Course ID** | ARCH 4812 |  |  |
| **FROM:** |  | **TO:** |  |
| **Department(s)** | Architecture Technology | **Department(s)** | Architecture Technology |
| **Course** | ARCH 4812 Architectural Design VIII:  Integrative Design | **Course** | ARCH 4812 Architectural Design VIII: Integrative Design |
| **Prerequisite** | ARCH 4712 or ARCH 4710 with a grade of C or higher | **Prerequisite** | ARCH 3612 or ARCH 3712 with a grade of C or higher |
| **Corequisite** | none | **Corequisite** | none |
| **Pre- or corequisite** | None | **Pre- or corequisite** | None |
| **Hours** | (no change) | **Hours** | (no change) |
| **Credits** | 5 | **Credits** | 5 |
| **Description** | (no change) | **Description** | (no change) |
| **Requirement Designation** |  | **Requirement Designation** |  |
| **Liberal Arts** | [ ] Yes [ ] No | **Liberal Arts** | [ ] Yes [ ] No |
| **Course Attribute (e.g. Writing Intensive, Honors, etc** |  | **Course Attribute (e.g. Writing Intensive, Honors, etc** |  |
| **Course Applicability** | [ x] Major  [ ] Gen Ed Required  [ ] English Composition  [ ] Mathematics  [ ] Science  [ ] Gen Ed - Flexible  [ ] World Cultures  [ ] US Experience in its Diversity  [ ] Creative Expression  [ ] Individual and Society  [ ] Scientific World  [ ] Gen Ed - College Option  [ ] Speech  [ ] Interdisciplinary  [ ] Advanced Liberal Arts | **Course Applicability** | [x ] Major  [ ] Gen Ed Required  [ ] English Composition  [ ] Mathematics  [ ] Science  [ ] Gen Ed – Flexible  [ ] World Cultures  [ ] US Experience in its Diversity  [ ] Creative Expression  [ ] Individual and Society  [ ] Scientific World  [ ] Gen Ed - College Option  [ ] Speech  [ ] Interdisciplinary  [ ] Advanced Liberal Arts |
| **Effective Term** | Spring 2019 |  |  |

**Rationale:** The modification will allow for students to focus their BTech studies by giving them the option of taking architecture classes that focus on technology. The changes will also facilitate a broader selection of options for students to complete their degree sequence.