Welcome and Introductions (Dept Chair)

Purpose of Advisory
- Fulfill Federal, State and Chancellor’s requirements.
- Assist departments and college in evaluating effectiveness of program and prep of graduates and transfers.
- Recommend changes to curriculum, facilities, and equipment
- Assist the program in identifying work experience opportunities

General Update-State of the College

Enrollment growth has slowed substantially at MtSAC.

Approval of 2012 Advisory Minutes - Mandatory

Review 2012 minutes and modify or approve.

Motion made by Martin Mason and seconded by Sarah Daum to approve the Minutes. All in favor.
Advisory-Driven Program Improvements to date complete or incomplete

| Modifications:                                                                 |   |
|                                                                              |   |
| - Substantial updates made to the ARCH21 and ARCH29 course outlines of record |   |
| - Request for a shop facility within building 13 is pending review by the Department of the State Architect. | Complete |
| - Request for a larger scale construction shop area is under design consideration. Facilities are currently planned to be located with the other programs in a new Technology building located where the pool facility is now. This is still in the preliminary study phase and there is still an immediate need for an area where architectural fabrication and construction related instruction can take place. | Shop facility pending approval for air handling system. In the preliminary study phase. Still an immediate need for an area where architectural fabrication and construction related instruction can take place. Complete |
| - We received funding to purchase a new laser cutting machine. It is currently housed in building 28 where the CNC router is also located. In order to facilitate this purchase the department substantially cut the requested faculty professional development and student assistants fund requests. | Complete |
| - Revisions were made to room 2235 to allow for a work area and resource center within that room. | Complete |
| - Consolidation of the Construction Inspection Program and the technical track was begun this semester by the new department co-chair. | In progress |
| - Discussion at the academic senate has started which will potentially include transfers from community college programs to universities as a means of validating a programs viability. | In progress. If adopted, we would be able to obtain an account of any student taken 12 units in our program who transferred to any school listed in national clearing house |
- Request for a field laboratory remains unfulfilled. Incomplete

<table>
<thead>
<tr>
<th>Program Completion Rates</th>
<th>Certificates</th>
<th>2012</th>
<th>2013</th>
<th>Reviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://datamart.cccco.edu/Outcomes/Program_Awards.asp">http://datamart.cccco.edu/Outcomes/Program_Awards.asp</a></td>
<td>Increase</td>
<td></td>
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<tr>
<td>Level I 157%</td>
<td>7</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level II-Design 70%</td>
<td>3</td>
<td>8</td>
<td></td>
<td></td>
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<tr>
<td>Level III-Design 680%</td>
<td>1</td>
<td>7</td>
<td></td>
<td></td>
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<tr>
<td>Level II–Tech 0%</td>
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<td>Level III – Tech 0%</td>
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</tr>
<tr>
<td>Degrees</td>
<td>Design track 133%</td>
<td>3</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Tech track 0%</td>
<td>1</td>
<td>1</td>
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Summary of Current and Projected Employment Outlook
http://www.labormarketinfo.edd.ca.gov/

LMI Data
As the department is in a state of change with the consolidation of the Technical and Construction

Data will be e-mailed to advisors once finalized program content is established.
Inspection portions of our program, Employment outlook data will be emailed to advisors once finalized program content is established.

Note concerning curriculum and program modification request

In order to make the changes required by the consolidation of the Technology Track and the Construction Inspection Program approved in last years meeting, as well as to bring greater specificity to our programs and course student learning outcomes, the Course Outlines of Record for the following courses as well as the makeup of certificates and degrees associated with them must be revised. Elements that are under consideration for change may include but not be limited to items such as course name and description, field trip requirements, unit count, measurable objectives sample exercises etc. The distributed document “Attachment A” contains a description of the suggested changes

Suggestion made to provide orientation to new adjunct faculty. (J. Ramos)

Motion made by Martin Mason and seconded by David Kataoka to give the architecture department permission to modify/change all their courses, certificates and programs as needed to meet state, internal and industry requirements to create the best possible program they can based on their judgment and referenced changes. All in favor. (Advisors voted and approved Amended Minutes of 3/3/15 to include inadvertently omitted document entitled Attachment “A” from Approved Minutes on 2/20/15)

<table>
<thead>
<tr>
<th>2 year Requisite Review-Mandatory (1/2 courses must be reviewed each year)</th>
<th>Course Title</th>
<th>Current Pre-requisite (PR), Co-requisite (CR), Advisory (A)</th>
<th>Appropriate Requisite Y/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH23</td>
<td>(A)ARCH10,11</td>
<td>(PR)ARCH16</td>
<td></td>
</tr>
<tr>
<td>ARCH21</td>
<td>(A)ARCH10,11</td>
<td>(CR)ARCH23</td>
<td></td>
</tr>
</tbody>
</table>

Due date: October 31

<table>
<thead>
<tr>
<th>Curriculum Review -</th>
<th>Course Title</th>
<th>4 Year Review Y/N</th>
<th>Modification Y/N</th>
</tr>
</thead>
</table>
**Alumni Input**

Alumni who have recently transferred to university level programs report being well prepared and happy with the education they received at MtSAC. Many of them however have stated that they could have profited from greater access and preparation with the use of the Suggestion made to teach the tool of knowing how to run your own CNC, how to use a laser cutter.

We do build models here, but if you teach them the materials and how to utilize them and work with proper tools you becoming well rounded.
following technologies and or instruction. The former MtSAC students surveyed are currently attending Cal Poly Pomona, UC Berkely, UCLA, USC, SCIArc, Woodbury and NewSchool. The list below is a compilation of all of the discussions and are not universal to all of the colleges mentioned.

| Fabrication Tools and CNC router process |
| Laser Cutting |
| 3D Printing |
| General shop preparation |
| Updated architectural drawing curriculum |
| Improved Sketching and rapid visualization skills |
| Updated use of rendering curriculum and tools |
| Instruction in algorithmic modelers like Grasshopper |

Encourage enrollment in hand drawing classes from the art and woodworking dept and how utilize those tools (alumni)

| Have CNC router |
| Laser cutter received |
| Researching low cost 3 d printing |
| Not completely implemented |
| Need direction to update |
| Need direction to update |
| Need direction to update |

A motion was made by Martin Mason and seconded by Evan Troxel that the advisory committee support the architecture program in acquiring computers, workstations, various equipment listed, and rearranging of 2 computer labs. Including, staffing, facilities, and professional development needs. All in favor.

| Documentation of Program Needs |
| Current Program Needs |
| o Equipment |
| o Staffing |
| o Professional Development |
| o Facilities |

Rearrange 2 additional computer labs to the same configuration as room 2235 which was approved by the advisory committee last year.

Install Workstations in rooms 2220 and 2215 to provide additional functionality

20 computer stations with high performance video
CGI cards, miller 211 portable welding kit with spool gun and alternate gas cylinders and safety equipment, air compressor, carpentry machinery, fabrication rigging and jigging components, CNC router table, Student assistants, faculty development funds, student competition funds, drafting and drawing equipment camera and video equipment, video editing software and computer, desk top 3d printers with low cost consumables, large format table top scanner, field construction laboratory, composites and plastics shop, carpentry shop, digital design software 4 lathes, 4 mills, Measuring equipment, CNC machine, CAM software, automation components (lab modules) Vacuum chamber (lab module and student projects) industrial air compressor lab tumbler, parts tumbler, floor mats, cold air nozzles.

Additional needs identified through advisory input
- Equipment
- Staffing

Professional Development

Advisory Input

| Changes in Technology: Hiring or transfer Preferences and Practices: What are the characteristics/skills sought in our students? | Contractors coming into his office are looking for Estimators. Past students are working out there |
that took the estimating classes, construction classes and working drawings. Some took arch classes. Work is out there in the film industry. (Joe R)

Referencing portfolio reviews: When the first thing seen is a CAD drawing of a suburban tract house that just shuts down the review committee. Whatever follows it, can’t ever upstage that. Any move you make along those lines would be really positive. (Len Z)

Referencing portfolio reviews: We specifically say do not include construction documents in the portfolio. The construction track is incredibly important for the arch students to take it, but tell them to keep that in their back pocket. Looking for in the first year is really design. Looking for the equivalent formal skills in the transfer students. There are a certain amount of technical skills like understanding how to do a drawing and understanding how to make a model and understand how to use fabrication tools needed. Most interested in seeing they have a kind of design vocabulary. That they understand how to put systems together. That they are not necessarily doing buildings. We really want more a kind of formal dexterity and form making. (Sarah L)
| What skills are lacking in current applicants or participants? | Projects Cal Poly sees are a little under cooked because there is not enough kind of understanding of what all of the issues are. They are not really dealing with critical thinking and sort of evolution and understanding all of the ways of communicating an idea and exploring an idea and conceptual design and systems. They tend to be more problem solving. (Sarah L)  

Design processes: The tools of how you would design something, whether it is via model making, drawing, writing or fabrication, all of those things probably want to be symphonsized more in terms of trying to address this notion of What, Why and How. Later on add the Where and When. (Louis M)  

Syllabi: Quickly moves into is problematic concerns as opposed to the exploration of what becomes a concept and the processes, principals and methods by which you can explore that and the sense of iterative development. (Louis M)  

General value comes in, in trying to understand the role of writing, understand our relationship in space, the role of understanding material, the role of understanding drawing, and making and |
<table>
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<tr>
<th>External Factors impacting the industry</th>
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- Building as a processes for thinking. It is really about getting those foundations and then we can build up on and then your students will transfer much more smoothly into our higher foundational courses. Address issues that would be helpful to your students as they prepare to transfer to universities. (Louis M)

- Students often times struggle when we place students into our lower division studies. They really shouldn’t struggle in trying to catch up with the other students. Have technical skills, but the ability that those technical skills answer a very simple notion of WHAT, why and how is still a little bit of a struggle (Louis M)

- There is a real break between education and real world in ARCH. Architecture school does not prepare you to work in a firm. ( )

- Larger firms feel Certificates from a JC are worthless. They won’t hire someone from a JC. They will barely higher someone from a university. (David K)

- Everyone wants someone with as experience. (Alumni)
Architecture and Industrial Design Engineering
Architecture Advisory Committee Minutes (Approved 2/20/15) Amended 3/3/15 with Attachment “A”
Friday, December 6, 2013
10:00 am. – Noon
Design Technology Center, Bldg 13, Room 2220

Const/Inspection Program Modification
Create a program that is not construction inspection, but is a broader based construction program that could articulate to Cal Poly, but also provide a means out for students who do not want to go into a college setting. A **program that can provide entry level skills.**

Our const inspection program we were looking to rename it something like construction engineering technology, building construction technology, construction technology.

On the contractor’s side we need to provide how do I propose an RFI to the arch? How do I put out a statement requesting bids, how do I keep a log? There is a whole litany of things that contractors have to do at more of the field level.

Should they all be taught by architects or should we have someone from the const field teach?

We want to take those tech track courses that are already separated from the ARCH design transfer track and get them into something where there will be a vibrant student population for them.

It was really hard to actually find a job coming out of school. (Matt T)

Suggestion made to get some Contractors on this advisory board as we currently have arch and educators. (David K)

Agreed we need this in another committee and we need contractors and building officials. (Joe R)

Need further verification that we need to include a CAL OSHA construction safety course as an entry level course to the program. (I Sardinas) New School opened a construction management program and are creating a “basic toolkit” hoping that construction managers at least understand a little bit of the way Architects think and visa versa so that there is a compatibility in the industry. They are members of the Alliance for Architects and Construction, (Len Z)

Motion made by Martin Mason that this should be a separate advisory committee a sub group to advise the construction/Inspection technology part as this is not the expertise of this group. Seconded by David. All in favor.
We are talking about integrative curriculum for some of our courses. So our level 1 digital media (computer) level 1 design communication (drawing) and our level 1 design studio if those three things could share a project that you do computer aspects, you do communication aspects in the other and design focuses on design, but they are all working on the same project. Does it help a student if they don’t have to work on a separate drawing project that is separate from the design project?

The issue would be having to take all those in one semester plus the availability of taking other classes. What if they only want to take the hand drawing and not the design studio. (Alumni)

So many students are working today, they often take courses that goes with their work schedule and has nothing to do with the academic schedule. (Len Z)

Guarantee that there is an option of being able to take all of them together would be good. The ability to take them separately is more of an opportunity than a liability at the moment. (Louis M)

It is not so much as to whether those merge or don’t merge. It is mostly about critical thinking. That is the area where most students find a bit of liability in being able to transfer from a program that is still heavily based on design as subject to a constructive ability rather than design. Think in terms of design not as problem solving as much as in problem defining and then in problem exploring. (Louis M)

Difficult to find faculty that would have both skills sets of being able to deliver a visualization or
The whole process of studio culture does not exist in high schools.

What I’m hearing is it should start to grow at a more even rate than go from a class that is about form making, form finding and problem solving immediately into our second manual processes as well as be able to deliver an introductory first year studio principles and processes, bodies and objects. (Louis M)

Woodbury wanted to integrate them fully. Finding that no you end up not teaching anything. They were trying to de-prioritize their difference, but in their visualization courses they start with manual processes first and then switch to the digital processes. (Louis M)

Not necessary and probably not practical to tie design and drawing and technology classes together. All of these three introductory classes can deal with a similar issue. You could similarly track the design, drawing and representation classes so that they are dealing with similar issues at each level without necessarily dealing with the same exact problem. (Sarah L)

It is still not just quickly problem solving. Your programs don’t need to be so closed ended, There is no definitive. I think there needs to really
<table>
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<tr>
<th>one which they start doing buildings. That there needs to be a broader focus and a more even pace to those entry level to develop those design skills. (Ignacio S)</th>
<th>be opportunity for exploration and that there are conceptual drivers that can be introduced. The idea that students can pick and choose across multiple departments is amazing. (Louis M.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>It may help you in your own internal debates of what do we have time for, what within two years, which is nothing as you know, what you can do and what have to leave behind. (Kurt H)</td>
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</table>
1. Modification of all of our courses. The following are changes brought about by a need to keep courses current with industry and transfer university standards. Course numbers need to be converted to 100 and 200 level numbers. Course names and descriptions need to be adjusted to reflect content. If possible adjust units upward to assist with articulation to universities.

2.

   a. ARCH10 “Design I - Elements of design” would be renamed “Design I”

      i. Adjust hours in COR to 54 lecture 54 lab
      ii. Adjust unit count from 3 to 4 based on item ii
      iii. Adjust course name, number and description
      iv. Update and modernize COR elements such as lecture/ lab outlines, measurable objectives etc. to make more compatible with industry and or transfer university standards
      v. Integrate a design reading and comprehension component that would include entry level design literature and process for evaluating and understanding conceptual approaches, specialized references, design jargon etc. When possible reading should integrate with the design project the students are working on that week.
      vi. Develop brief case studies and simple research related to the design project being undertaken. Integrate regular weekly visits to the library and incorporate the Information Literacy program into the course requirements.
      vii. The final project for this course has been a small retreat or residence. That project would be moved to design II.
      viii. The additional 5 weeks would be used to explore additional formal projects.
ix. Each of the formal projects produced during the semester would be given a simple programmatic use such as entry canopy, shade structure, observation tower/platform etc.

x. A new synthesis component (final project) would require the student to place all of the objects into a park like setting incorporating the assigned simple uses in a logical, functional and visually satisfying fashion.

xi. Adjust maximum enrollment from 24 to 18 similar to Interior design program.

xii. Require a digital component utilizing 3 dimensional modeling.

b. ARCH11 “Architectural drawing” would become Design Communication and Culture

i. Adjust hours in COR to 54 lecture 54 lab

ii. Adjust unit count from 3 to 4 based on item ii

iii. Adjust course name, number and description

iv. Update and modernize COR elements such as lecture/lab outlines, measurable objectives etc. to make more compatible with industry and or transfer university standards

v. The content of this course would continue to include basic drawing and sketch based rapid visualization skills using the 3 dimensional objects directly related to the forms developed in the ARCH10 Design I course but available in premade form for students who are not taking arch10.

vi. Additional content would also include as an introduction to the profession of architecture, the study of current projects, issues, designers and trends. These topics would need to be standardized and covered in a similar fashion in all sections of the course. Standardized assessment methods would be used to assure compliance and consistency between classes.
vii. The Case Study process and its importance as a means of understanding precedence and a potential point of departure would be included as a component of the course.

viii. If we can’t create an intro GE course that includes field trips then incorporate cohort based field trips to design schools and professional offices

c. ARCH16 “Basic CAD and Computer Applications” would become “Digital Media 1”

i. Adjust course name, number and description

ii. Update and modernize COR elements such as lecture/ lab outlines, measurable objectives etc. to make more compatible with industry and or transfer university standards

iii. Additional emphasis would be placed on 3 dimensional modeling in addition to CAD based drawing

iv. Digital fabrication would be included at a basic level.

v. Base content for course on shared projects with Arch10

d. ARCH13

i. Adjust course name number and description

ii. Update and modernize COR elements such as lecture/ lab outlines, measurable objectives etc. to make more compatible with industry and or transfer university standards

e. ARCH14

i. Adjust course name, number and description

ii. Update and modernize COR elements such as lecture/ lab outlines, measurable objectives etc. to make more compatible with industry and or transfer university standards
f. ARCH15
   i. Adjust course name, number and description
   ii. Update and modernize COR elements such as lecture/ lab outlines, measurable objectives etc. to make more compatible with industry and or transfer university standards

g. ARCH18
   i. Adjust course name, number and description
   ii. Update and modernize COR elements such as lecture/ lab outlines, measurable objectives etc. to make more compatible with industry and or transfer university standards

h. ARCH21
   i. Adjust hours in COR to 54 lecture 54 lab
   ii. Adjust unit count from 3 to 4 based on item ii
   iii. Adjust course name, number and description
   iv. Update and modernize COR elements such as lecture/ lab outlines, measurable objectives etc. to make more compatible with industry and or transfer university standards

i. ARCH23 “Architectural Presentations” would become Digital media and Design communication
   i. Adjust hours in COR to 54 lecture 54 lab
   ii. Adjust unit count from 3 to 4 based on item ii
   iii. Adjust course name, number and description
iv. Update and modernize COR elements such as lecture/lab outlines, measurable objectives etc. to make more compatible with industry and or transfer university standards

v. Set a hard prerequisite of Arch16 for this course

vi. Create a co-requisite with Arch21

j. ARCH26
   i. Adjust course name, number and description
   ii. Update and modernize COR elements such as lecture/lab outlines, measurable objectives etc. to make more compatible with industry and or transfer university standards

k. ARCH27
   i. Adjust hours in COR to 54 lecture 54 lab
   ii. Adjust unit count from 3 to 4 based on item ii
   iii. Adjust course name, number and description
   iv. Update and modernize COR elements such as lecture/lab outlines, measurable objectives etc. to make more compatible with industry and or transfer university standards

l. ARCH28
   i. Adjust course name, number and description
   ii. Update and modernize COR elements such as lecture/lab outlines, measurable objectives etc. to make more compatible with industry and or transfer university standards

m. ARCH29
   i. Adjust hours in COR to 54 lecture 54 lab
ii. Adjust unit count from 3 to 4 based on item ii

iii. Adjust course name, number and description

iv. Update and modernize COR elements such as lecture/ lab outlines, measurable objectives etc. to make more compatible with industry and or transfer university standards

n. ARCH31

i. Adjust course number, name and description

ii. Update and modernize COR elements such as lecture/ lab outlines, measurable objectives etc. to make more compatible with industry and or transfer university standards

o. ARCH32

i. Adjust course number, name and description

ii. Update and modernize COR elements such as lecture/ lab outlines, measurable objectives etc. to make more compatible with industry and or transfer university standards

p. ARCH89

i. Adjust course number, name and description

ii. Update and modernize COR elements such as lecture/ lab outlines, measurable objectives etc. to make more compatible with industry and or transfer university standards

q. ARCH12

i. Adjust course name, number and description

ii. Update and modernize COR elements such as lecture/ lab outlines, measurable objectives etc. to make more compatible with industry and or transfer university standards
iii. Incorporate the steel project with various methods of connecting metal (weld, bolt, screw, slot etc.). Also require the integration and attachment method of various materials to the steel. Examples could include glass to steel, wood to steel, plastics to steel, aluminum to steel etc.

iv. Consider the creation of a patterned block with a void(s) with could be set with glazing to allow diffuse light into a room or area.

v. Incorporate a void in the concrete paver.

3. Create a new Foundational “skills” level certificate (including the new unit counts as follows)

   i. ARCH10  4 units
   ii. ARCH11  4 units
   iii. ARCH16  4 units
   iv. Total units  12 units

4. Revise/create Level - I architecture design certificate (including the new unit counts as follows)

   i. ARCH10  4 units
   ii. ARCH11  4 units
   iii. ARCH16  4 units
   iv. ARCH21  4 units
   v. ARCH23  4 units
   vi. Total units  20 units
5. Revise Level - II architecture design certificate (including the new unit counts as follows)
   
   i. ARCH10 4 units
   ii. ARCH11 4 units
   iii. ARCH16 4 units
   iv. ARCH21 4 units
   v. ARCH23 4 units
   vi. ARCH12 4 units
   vii. ARCH27 4 units
   viii. ARCH31 3 units
   ix. Total units 31 units

6. Revise Level - III architecture design certificate (including the new unit counts as follows)
   
   i. ARCH10 4 units
   ii. ARCH11 4 units
   iii. ARCH16 4 units
   iv. ARCH21 4 units
   v. ARCH23 4 units
   vi. ARCH12 4 units
   vii. ARCH27 4 units
   viii. ARCH31 3 units
   ix. ARCH13 4 units
### 7. Create new Level - I architecture technical certificate (including the new unit counts as follows)

- **i.** ARCH10 4 units
- **ii.** ARCH11 4 units
- **iii.** ARCH16 4 units
- **iv.** ARCH12 4 units
- **v.** ARCH18 3 units
- **vi.** Total units 19 units

### 8. Revise Level - II architecture technical certificate (including the new unit counts as follows)

- **i.** ARCH10 4 units
- **ii.** ARCH11 4 units
- **iii.** ARCH16 4 units
- **iv.** ARCH12 4 units
- **v.** ARCH18 3 units
- **vi.** ARCH14 3 units
- **vii.** ARCH26 3 units
- **viii.** INSP70 3 units
ix. Total units 28 units

9. Revise Level - III architecture design certificate (including the new unit counts as follows)
   i. ARCH10 4 units
   ii. ARCH11 4 units
   iii. ARCH16 4 units
   iv. ARCH12 4 units
   v. ARCH18 3 units
   vi. ARCH14 3 units
   vii. ARCH26 3 units
   viii. INSP70 3 units
   ix. ARCH146 3 units
   x. INSP71 3 units
   xi. EDT26 3 units
   xii. Total units 37 units

10. Continue work with counseling and administration.
   a. Identify those students that choose to declare architecture as a major.
   b. Develop a simplified 4 semester course matrix with a brief explanation of why the suggested courses should be taken together.
   c. Reach an agreement with interested parties that requires the distribution of the department suggested course sequence.

11. Establish an architecture department orientation for any students enrolled in one of the entry level courses.
a. One method of creating this cohort based large scale meeting that would facilitate this type of orientation is to specify it as an on campus field trip in the CORs of ARCH 10,11,16
b. Adopt department policy make it mandatory for all faculty teaching one of these courses to include it in their syllabus as a graded mandatory field trip the second week of class that would act as the orientation.
c. The trip could be run on a Saturday or a Sunday to lower the possibility of a conflict.
d. A test could also be a part of this orientation field trip.
e. Counseling should be invited to participate.
f. Distribute department simplified course matrix for all programs at this meeting
g. Explain the GPA issue and have the students work with the GPA calculator.

12. Develop an introduction to architecture and construction course similar to the MtSAC engineering department. Course would be a survey of the design and building industry professions. This request is a product of prior discussions with counseling and others on the campus. This course could be a General Education lecture hall type of course with a large amount of students. Course should include field trips to design schools, professional multidisciplinary offices and landmark projects. It should also present critical issues in the building and environmental fields. Course should meet once a week for several hours to accommodate the field trips. (note is this is not possible then see simplified implementation into arch11)

13. Continue to work with engineering department to incorporate a project based critical thinking course into our course offerings.
14. Research establishing learning community courses with Speech and English department focused on the need of architecture students
15. Verify that field trips are listed in the COR description for any courses that may possibly need to take field trips. This requires consent of the advisory to modify the CORs.
16. Consistency in student learning outcomes and measurable objectives between different sections of the same course taught in the same semester:
   a. Modify the official outlines of record to tighten up the course measurable objectives as well as standardize the means of assessment.
   b. Develop specific SLOs and apply them to verify consistency.
17. Consistency in student learning outcomes and measurable objectives in the same course taught in different semesters by different faculty. (see suggested measures for previous line item)
18. Adoption of linked classes in lieu of establishing a ridged cohort, leaving the evening classes available for those wishing to take the courses in a slower fashion.
19. Possible establishment of study periods between the linked classes. For example, we could schedule a section of ARCH16 in the morning time slot (7:50-11:00) followed by an open period (12:3-10), after which the student would proceed to ARCH10 from 3:40-6:50. The student would be highly encouraged to not take another course during the open time slot and a teaching assistant would be available during that time slot to help students with their projects. Need to determine if attendance can be required.
20. Coordinated first semester curriculum
   a. Currently we have 3 entry level courses we would like to coordinate.
      i. ARCH10 Design 1-elements of design
      ii. ARCH11 Architectural drawing
      iii. ARCH16 Basic CAD and computer application
   b. We would like to have the ARCH11 drawing and ARCH16 Computer courses use the subjects from the Design class rather than other objects or buildings as the means of learning the content of each course. We feel that all students could gain the
intended basic knowledge and skills from those 2 respective courses as well as deepening the transfer track student understanding of the core design course and provide drawings to compliment the 3 dimensional formal work of the design class.

21. Coordinated second semester curriculum
   
   a. Currently we have 3 second level courses we would like to coordinate.
      i. ARCH21 Design 2
      ii. ARCH23 Presentation and Digital Media
      iii. ARCH12 Methods and materials of construction

22. Articulation agreements
   
   a. Review status of articulation agreement with UC Berkeley. Keep in mid the requested change of an new ARCH course to match UC Berkely’s ENV1 course.
   
   b. Explore interest from CBU and NSAD in establishing an articulation agreement or in articulating specific courses.

23. Facilities and equipment needs
   
   a. Field laboratory (previously requested)
   b. Shop facilities (previously requested)
   c. Portable welding equipment including spool gun and alternate gases
   d. Composites shop and equipment
   e. Inexpensive 3d printers
Architecture and Industrial Design Engineering
Architecture Advisory Committee Minutes (Approved 2/20/15) Amended 3/3/15 with Attachment “A”
Friday, December 6, 2013
10:00 am. – Noon
Design Technology Center, Bldg 13, Room 2220
Construction Technology program revisions

1. Rename Program from “Construction Inspection” to a new more descriptive name:
   a. Possible names may include but are not limited to
      i. “Construction Technology”
      ii. “Construction Engineering Technology” (like CPP)
      iii. “Building and Construction Technology”
      iv. “Construction Engineering and inspection technology”

2. Revise/create Level - 1 architecture design certificate (including the new unit counts as follows) or consider creating 2 levels.
   i. ARCH12 4 units
   ii. ARCH14 3 units
   iii. INSP17 3 units
   iv. INSP67 3 units
   v. INSP70 3 units
   vi. INSP71 3 units
   vii. INSP87 3 units
   viii. EDT26/new name 3 units
   ix. MATH51 4 units
   x. Total units 29 units
3. Include a Cal OSHA construction safety course as an entry level course to the program.

4. Informal discussion with students reveal that some of the courses (legal aspects of construction, construction estimating, fundamentals of building inspection) may need to be taught by construction industry personnel.

5. Need construction industry representatives who would be willing to help guide and improve this program.

6. In order to articulate courses with CSU Construction programs (IE Cal Poly Pomona’s Construction Engineering Technology) we need to add a lab component to our current lecture only INSP courses. Professor Hovel Bavikian from CPP CET program offered last year to create an articulation agreement with our program. We propose working with MtSAC’s articulation liaison and Professor Bavikian to determine what modifications would be required.

7. The technology track should have a vocational hands-on construction component in addition to the computer and practice based portions of the program. These courses could link the subject matter of what is represented in drawings and more abstract subjects with the more concrete processes of making a physical object like a foundation component, wall section, or roof assembly.

8. Need to have a scheduling component to the program. Could be tied to the estimating class. IE estimating and scheduling

9. Need to have course content in contractor side construction administration. IE preparation of submittals, substitutions, RFIs, RFCs, field logs, sub contract bid procedures etc.

10. Revise EDT26 to be a construction program course covering civil engineering technology, surveying and site work.
Landscape Architecture Certificates

1. In recent years we have had several students accepted to the Landscape Architecture programs at both Cal Poly Pomona and SLO. In order to assist those students with planning we propose creating 2 new certificates, Landscape Architecture I and II, composed of a combination of architecture design courses and other articulated courses from Horticulture and Art. As we look at several of our design courses we need to consider creating alternate final projects based on the direction a student wants to head in. Coordinate with LeeAnn Milburn and Renee Tang to get input on the certificates.

a. Level I
   
   i. ARCH10 4 units
   
   ii. ARCH11 4 units
   
   iii. ARCH16 4 units
   
   iv. ART15A 3 units
   
   v. AGOR1 3 units
   
   vi. Total units 18 units

b. Level II
   
   i. ARCH12 4 units
   
   ii. ARCH21 4 units
   
   iii. ARCH23 4 units
   
   iv. SURV1A 3 units
v. AGOR13 3 units

vi. Total units 18 units