

Fall 2021 OAC Meeting



Committee Member Roster

Program: Drafting and Design Technology

Campus: Lacombe

Associate Provost Approval (signature): _____

Name	Employer	Title	Business Address	Contact Information (phone #/email address)
1. Mr. Ryan White	Inline CAD and Coordination LLC	Owner	30085 Red Mill Dr, Lacombe, LA 70445	985.218.9900 Ext. 101 ryan@inlinecad.com
2. Mr. Mike Beauvais	SELU, NTCC (currently retired)	Instructor	n/a	985-429-9529 michaelbeauvais41@gmail.com
3. Mr. Tim Schiro	Ferrara Fire Apparatus Inc.	Chassis Designer	27855 James Chapel Rd., N. Holden, LA 70744	985-237-4267 timschiro@gmail.com
4. Ms. Owen Smith	NTCC	Dean – Lacombe campus	65556 Centerpoint Blvd, Lacombe, LA 70445	985-545-1500 owensmith1@northshorecollege.edu
5. Mr. Viorel “Vee” Florea	NTCC	Drafting Instructor	65556 Centerpoint Blvd, Lacombe, LA 70445	985-545-1500 viorelflorea@northshorecollege.edu
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**Occupational Advisory Committee (OAC) Meeting
Drafting and Design Technology – Lacombe Campus
December 13, 2021 – 10:00 am (Virtual Meeting via Teams)**

Welcome and Call Meeting to Order

Discussion of Minutes of Last Meeting

Old Business:

New Business:

1. Business and Industry Update (OAC)
2. Curriculum Review
 - i. Review of Admissions Requirements
 - ii. Review of Program Content
 - iii. Review of Program Length
 - iv. Review of Delivery Modes Offered
 - v. Review of Equipment and Materials (OAC only)
 - vi. Transfer Articulation Agreements (TAC only)
3. Program Review
 - i. Discuss Program Assessment Plan Results
 - ii. Student Evaluation
 - iii. Discuss Program Health Index Results (as applicable)
4. Action Items & Action Report (Industry Prompted Action Items)
 - i. Action items requested of the Program of Study from the OAC
 - ii. Report on progress related to action items established at previous OAC

Adjourn

Occupational Advisory Committee Minutes

**NTCC – Drafting and Design Technology
December 13, 2021 – 10:00 am (online meeting via Teams)**

Members Present: Mr. Ryan White, Mr. Michael Beauvais, Mr. Tim Schiro

Members Absent: None

Guests Present: Dean Owen Smith, Mr. Viorel “Vee” Florea

The Drafting and Design Technology program held its Fall 2021 semi-annual Advisory Committee meeting on December 13, at 10:00 a.m. Vee Florea welcomed the group, expressed his appreciation for each Committee’s member participation and called the meeting to order.

Old Business

There was a brief review of the minutes from the May 4, 2021 meeting.

The short discussion centered around the transition of course delivery from “virtual” and “hybrid” formats back to “in-person” format. It was noted that eight out of ten drafting courses were held online. It was also noted that the sudden need to adapt to the old, traditional format presented some re-adapting problems for some students, including adjustments of their work schedules (for those who do work) as well as some possible technology problems (i.e. computer and/or internet access).

The minutes were approved by the committee without objection.

New Business

Industry Update

Mr. Ryan White briefed the Committee with his view of the drafting industry as it stands at this moment.

He noted the tendency of the drafting profession moving more and more away from Autocad towards Revit as well as other parametric, 3D software (especially in commercial and industrial construction) with Revit being the dominant platform. He stressed that although Revit was in the past more architecturally and structurally driven, it has transitioned lately into the MEP (i.e. Mechanical, Electrical, Plumbing) specialties as a result of industry’s preference for a one-size-fits-all approach which ensures continuity across most different construction fields.

He noted that his company had taken the initiative of embracing Revit early on as a response to this trend and also due to his company’s clients/collaborators embracing Revit based projects. He mentioned another emerging software, NavisWorks, which he thinks would be beneficial for our students to learn, given its increased usage within the industry. He described briefly some of the notable features of this software, noting some of its many advantages in the model creation process. Mr. White believes that even a basic level of knowledge in handling this software would benefit the newly hired drafters in becoming more productive, early on.

Vee Florea asked Mr. White how does he addresses from a practical standpoint the newly hired drafters’ lack of knowledge in Revit and/or NavisWorks relative to his company’s production needs. Do the newly hired embark on some self-study regimen on these software or do they undergo a more formal on-the-job training provided by the company? Mr. White responded that his company has access to some online training courses through a company called *Cadlearning.com*. Another way of dealing with this problem is to bring their newly hired

drafters into meetings with their more experienced personnel as an introduction and then going from there. He noted that in the case of NavisWorks there is not a big learning curve and even his company's more experienced professionals are not extremely well trained and in this software.

Addition of new Software to the Drafting Curriculum

Vee Florea asked Mr. White what would be his recommendations for the most needed software that could be added to our Drafting curriculum and he responded: Revit and NavisWorks, noting that in fact one of his newest drafters hasn't even touched Autocad in the short time he worked for him. He indicated that retraining new drafters (as in guiding them away from Autocad, towards Revit and NavisWorks) is not an easy process, but the sooner it's done, the better. Vee Florea then asked Mr. White if he thinks his company would benefit the most from drafters trained at introductory level in multiple software as opposed to maybe one software taught at a more in-depth level. Mr. White responded that multiple software training is better and that many of our drafters working for him showed a higher interest in the design aspects of drafting although in reality they will only get to do component /assembly details since construction design work would require a higher level of academic preparation (i.e architectural / engineering four year program).

Mr. Tim Schiro was then asked about his company's software use and how does he view the addition of new 3D software in our Drafting curricula, as a former NTCC student. He said that his company Ferrara Apparatus which designs fire trucks from the ground up uses Inventor primarily and Autocad to a lesser extent. He supported the idea of adding new software to our curricula naming SolidWorks and Revit among his preferences.

Mr. Mike Beauvais was invited to give us some thoughts on this topic. He stated that the future of the Drafting Program depends on the introduction of new software. He said that we don't need to teach a "history" of drafting but we need to rather teach drafting for the workplace. He said that we should also consider the Civil 3D software given the amount of infrastructure work waiting to happen in this country. He added that since Inventor and SolidWorks have a fair amount of similarities between them, he would stick with Inventor rather than SolidWorks, also given the high price factor in the case of SolidWorks. Mr. White intervened by pointing out that while Autocad is known for being a more line-friendly software (used more in P&ID applications) any of the parametric 3D software in discussion are geared toward more complex, integrated multi-disciplinary applications that drafters are likely to encounter in the real world. Vee Florea noted that although Autocad has been "shadowed" by newer, parametric 3D software, it still retains its value as a basic line-centered software suitable for teaching introductory level drafting as it relates to border-disciplines such as geometry/ projections/ graphic literacy, etc. Mr. Beauvais agreed that Autocad is good for the fundamentals.

Dean Smith was then invited to share her thoughts on the subject of adding new software to the Drafting curriculum. She indicated that the College looks at implementing these curriculum changes for the Fall 2022 semester and the important discussions on how practically we should operate this software addition is a matter of future discussion between herself, the Dean of Technical Studies, existing and former drafting faculty and NTCC's Leadership. Dean Smith voiced her agreement to a previous point in the discussion mentioning the "drafting for the workplace" as one of the criteria that we need to focus on while adding new software to the curricula. She then continued by noting some of the challenges that the Drafting Program has been facing during the most recent semesters, notably low enrollment, student engagement and retention. Mr. White pointed out the benefits that software demonstrations presented in class by our business partners would bring in terms of stimulating student interest, energizing their commitment, defining their professional objectives and helping them understand the specifics of different drafting fields. Industry exposure can go a long way for the students, also in terms of excitement and motivation. said Mr. White. Dean Smith agreed that industry exposure is very

important and should be implemented now that the pandemic is somewhat under control and classes reopen for in-person teaching. While discussing the topic of how to implement this introduction of the new software, Mr. Beauvais noted that it will be beneficial for the purpose of raising the student interest and excitement that the introduction of the new, 3D software take place as early as the 1st semester at introductory level and continue into the 2nd semester at intermediate level. Everybody agreed.

Program Items Review

Finally, Vee Florea went on with the rest of the Agenda, reviewing briefly the Admission Requirements, the Program Content, the Program Length and the Delivery Mode.

Committee members found the Program items listed above to be satisfactory in their implementation and had no additional comments and recommendations.

Final Thoughts

Mr. Beauvais expressed satisfaction that the Associates Degree is back in Drafting with the addition of Gen-Ed classes. In this context, Vee Florea asked Mr. White if it does matter to him whether a potential new drafting candidate that he interviews has a degree of Technical Diploma as opposed to an Associates Degree. Mr. White responded that for him it doesn't make a big difference as long as he sees commitment on the part of the candidate while also relying heavily on the instructor's recommendation on that student's academic performance. He said that probably the most important factor in his final decision on hiring a drafting candidate is his/her interest and intellectual abilities, more so than a piece of paper. Another important thing in the decision process for a potential new hire is the candidate's Portfolio -especially the technical detailing side of it and the feasibility of his/her technical midset, as in "is this project buildable at the end of the day"?).

Action Items

Further meetings will be needed during the Spring 2022 semester to discuss the practical implementation of new software addition which is scheduled to take place in the Fall 2022 semester.

Meeting was adjourned at 11:27 am

Respectfully submitted,

Viorel "Vee" Florea

Spring 2022 OAC Meeting

Committee Member Roster

Program: Drafting and Design

Campus: Lacombe Campus

Associate Provost Approval (signature): _____

Name	Employer	Title	Business Address	Contact Information (phone #/email address)
1. Viorel Florea	NTCC	Instructor		viorelflorea@northshorecollege.edu
2. Bahiy Watson	NTCC	Adjunct Instructor		bahiywatson@northshorecollege.edu
3. Jason Philpot	Ampirical	Director, Drafting & Design		jphillpott@ampirical.com
4. Jameson Fellows	Weeks Marine	Drafter		jfellows@weeksmarine.com
5. Nick Lemoine	Weeks Marine	Director, Drafting & Design		nlemoine@weeksmarine.com
6. Mike Beauvais	Retired/ NTCC & SLU	Instructor		Michaelbeauvais41@gmail.com
7. Owen Smith	NTCC	Campus Dean and Drafting & Design Program Lead		Owensmith1@northshorecollege.edu



**Occupational Advisory Committee (OAC) Meeting
Drafting and Design – Lacombe Campus
May 17, 2022**

Welcome and Call Meeting to Order

Discussion of Minutes of Last Meeting

Old Business:

New Business:

1. Business and Industry Update (OAC)
2. Curriculum Review
 - i. Review of Admissions Requirements
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Adjourn



**Drafting and Design Program
Lacombe Campus
Occupational Advisory Committee Minutes
May 17, 2022, 2:00 PM**

Members Present: Viorel Florea - Instructor, Owen Smith – Lacombe Campus Dean, Bahiy Watson – Adjunct Instructor, Jason Philpot – Ampirical, Jameson Fellows – Weeks Marine, Nick Lemoine – Weeks Marine, Mike Beauvais - ??,

Guest: Mary Slazer, NTCC Director of Institutional Advancement Services

Viorel Florea called the meeting to order at 2:00 PM.

Minutes of Last Meeting:

Florea noted that the minutes of the 12/13/2021, meeting had been distributed by email. He stated that the minutes captured important discussion about the best software to supplement curriculum. Since that meeting, Dean Smith and the college administration decided to add Introduction to Revit, which will start in Fall 2022, taught by Bahiy Watson. The 1101 Fundamentals of Drafting curriculum was updated to incorporate material from the previous 1103 Geometric Drafting. The 1103 Introduction to Revit was added.

Florea asked if there were any comments or discussion of the previous meeting's minutes. Mike Beauvais responded that the minutes look good, adding that it appears that concerns noted at the last meeting are being addressed by the addition of the Introduction to Revit course, which will excite and motivate students. Florea expressed his belief that AutoCAD is still a good, trusted, line-based software that is a good introduction to drafting.

Industry Needs:

Florea noted that Ampirical has hired NTCC graduates. Jason Philpot confirmed that they are still employed at Ampirical. Regarding preparation for work, he added that it's good to introduce students to styles of drafting and software that are more useful to industrial applications. Philpot confirmed that software choices are sometimes dictated by customer preferences. Ampirical uses Inventor and Bentley, so it would be good for students to see how features are used across the various platforms. Beauvais added that any 3D parametric software can be used as a robust introduction to design and workflow.

Florea asked how NTCC can better prepare students for employment at Weeks Marine. Nick Lemoine responded that there is crossover between different platforms, so if students learn one it's fairly easy to switch. He added that it's important for students to learn industrial components and industrial drawings. Jameson Fellows added that the biggest challenge he sees is that students lack knowledge of fundamentals. Students need to know how to do 2D well so they can do projections – they lack understanding of how to do the "3rd view" projection of a drawing. Perhaps they need to be refreshed

on doing projections as they get closer to graduation. Fellows added that 60-65% of Weeks Marine's older drawings are AutoCAD, but they are moving to 3D, especially to make parts that are hard to design, perhaps because it's at an odd angle, to make those easy to manipulate. Those are then converted to 2D and included in the general arrangement. Weeks uses SolidWorks software, but knowledge of one software translates easily to another. Florea noted that NTCC looked at SolidWorks but currently NTCC is teaching Inventor. Beauvais noted that there is no price break for SolidWorks in the academic environment, making it quite cost prohibitive. He suggested adding a view videos of SolidWorks to the Inventor class so students can see the parallels. Fellows added that knowledge of how to model parametrically is important, as is how to put together and read a drawing. He reported that Weeks Marine doesn't convert 2D drawings to 3D if they don't have to because it's a small drafting department and the conversions are too labor intensive. Regarding Inventor versus SolidWorks, Bahiy Watson stated that he teaches concepts of Parametric Modeling so students can see what is consistent across the various software platforms. Watson inquired about Weeks Marine's use of geometric dimensioning and tolerancing. Fellows responded that tolerances aren't as important for large equipment, although he has used it in gearbox drawings.

After discussion, it was decided that it is important is for students to be able to read prints and to represent objects in real space. They need to understand different views and spatial visualization. It would be beneficial to students to see some of the actual prints from industry partners. Fellows added that all industries have old drawings that may be scanned improperly, e.g., skewed 5 degrees, so students need to be able to read and recreate those drawings correctly.

Curriculum Review:

Dean Smith reviewed that the Revit course has been added to the 1st semester curriculum. The Dual Enrollment High School instructor is also excited about the change to the 1101 class, although after today's discussion, she sees it will be important to not rush through the fundamentals. She added that Weeks Marine has offered real prints for classroom use and it would be beneficial for those conversations to continue. The program is still 2 semesters, which was in response to industry demand.

Regarding the Program Health Index, Smith stated enrollment and retention are dropping. She is not sure how much the pandemic contributed to that. There is strong Dual Enrollment, but the bridge to continue at NTCC is not strong. Beauvais stated that he thinks combining the Fundamentals and Geometric Drawing classes will help. He inquired whether NTCC is going back to 100% in-person classes. Smith responded that due to staffing shortages, NTCC will continue with a hybrid of in-person and on-line classes.

Florea stated that NTCC would like to maintain close contact with the business and industry representatives on the committee, suggesting that they could perhaps share basic, real-life projects, including red-lining or converting the scanned documents mentioned earlier. He also suggested that business partners could be guest speakers to the classes from time to time. Fellows stated that Weeks has already provided a pump skid drawing with redlines. He will provide more entry level projects as they become available.

Workforce Needs:

Florea asked the committee members about workforce needs. Fellows replied that the Weeks Marine department is small, but currently they could use 2 or 3 new employees. They have made an offer to 1

NTCC student for a trial run. They also need interns and internships usually lead to job offers. Philpot said the situation is the same at Ampirical.

Admissions and Program Design:

Smith explained that NTCC has an open admissions policy, i.e., there is no entrance exam. The college is SACSCOC accredited, so students can earn an Associate's Degree in Applied Sciences with a concentration in Drafting and Design. Graduates who earned a Technical Diploma can come back to complete their AAS. Students who earn the AAS can also transfer to a 4-year university. Regarding program design, Smith stated that evaluation will continue and the program can be enhanced to be sure graduates are work ready. She added that dual enrollment high school students complete the first half of the first semester. Drafting and Design is a fast track program which can be completed in 2 semesters, but it would be possible to add a 3rd semester. Smith stated that there may be Perkins Grant funding to purchase SolidWorks or other software.

Conclusion:

Florea stated the next meeting will be in Spring 2023. The college is transitioning to once yearly advisory committee meetings, but there will be continuing dialogue & collaboration between meetings.

Respectfully submitted,



Mary Slazer, Director of Institutional Advancement Services

5/19/2022

Date