## Standard \#4 Measurement and Analysis of Student Learning and Performance

## Use this table to supply data for Criterion 4.2. (Figure 4.2 in self-study)

| Performance Indicator | Definition |
| :---: | :---: |
| 1. Student Learning Results | A student learning outcome is one that measures a specific competency attainment. Examples of a direct assessment (evidence) of student learning attainment that might be used include: capstone performance, third-party examination, faculty-designed examination, professional performance, licensure examination). Add these to the description of the measurement instrument in column two: <br> Direct - Assessing student performance by examining samples of student work <br> Indirect - Assessing indicators other than student work such as getting feedback from the student or other persons who may provide relevant information. <br> Formative - An assessment conducted during the student's education. <br> Summative - An assessment conducted at the end of the student's education. <br> Internal - An assessment instrument that was developed within the business unit. <br> External - An assessment instrument that was developed outside the business unit. <br> Comparative - Compare results between classes, between online and on ground classes, Between professors, between programs, between campuses, or compare to external results such as results from the U.S. Department of Education Research and Statistics, or results from a vendor providing comparable data. |

Business Management (PLO 6): Students will be able to apply the concepts of business and management principles to enhance the effectiveness of technological organizations

| Performance Measure | What is your measurement instrument or process? | Current Results | Analysis of Results | Action Taken or Improvement made | Insert Graphs or Tables of Resulting Trends |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $75 \%$ of the co-op evaluations will achieve a rating of average or above from co-op employers. | Co-op Employer Survey <br> Formative <br> External <br> Indirect | Fall 2019: $83 \% \mathrm{~N}=29$ Winter 2020: $79 \% \mathrm{~N}=112$ Spring 2020: $77 \% \mathrm{~N}=156$ Fall 2020: $76 \% \mathrm{~N}=29$ Winter 2021: $76 \% \mathrm{~N}=120$ Spring 2021: $80 \% \mathrm{~N}=233$ Fall 2021: $84 \% \mathrm{~N}=31$ Winter 2022: $83 \% \mathrm{~N}=80$ Spring 2022: $83 \% \mathrm{~N}=239$ Fall 2022: $73 \% \mathrm{~N}=30$ Winter 2023: $86 \% \mathrm{~N}=100$ | Expectations were met <br> Expectations were met <br> Expectations were met <br> Expectations were met <br> Expectations were met <br> Expectations were met <br> Expectations were met <br> Expectations were met <br> Expectations were met <br> Expectations were NOT met <br> Expectations were met | $>75 \%$ of students are consistently rated as average or above average by their employers. This meets the School's target. In 2020, students were able to participate in Co-op after completing Year-1; previously they were only eligible for Co-op after Year-2. Consistently maintaining a score of $>75 \%$ in this measure indicates that allowing Year-1 students to particpate has not been detrimental. No immediate action is planned. The data from Fall 2022 is an outlier and likely not significant considering the small N (30). |  |  |  | Man | nagement <br> 76\% ${ }^{80 \%}$ |  | 6) - All <br> $83 \%$ |  |  |
| $50 \%$ of our students will be at the 50th percentile ranking or higher versus other participants in Canada based on GLO-BUS strategy simulation game | Glo-Bus (LAR -Canada): <br> - Financial Analysis <br> - Operations Management <br> - Human Resources Mgmt <br> Summative <br> External <br> Comparative <br> Direct | Fall 2019: 59\% <br> Fall 2020:58\% <br> Fall 2021: 55\% <br> Fall 2022: 59\% | Expectations were met. <br> Expectations were met. <br> Expectations were met. <br> Expectations were met. | No planned action or improvements. Student performance in this comparative performance measure indicates that the students are generally successful relative to their peers at other institutions. An article on the success of a particular group can be found here: <br> https://www.eng.mcmaster.ca/new s/automation-engineering-technology-students-have-exceptional-performance-globalbusiness/ | $100 \%$ $90 \%$ $80 \%$ $70 \%$ $60 \%$ $50 \%$ $40 \%$ $30 \%$ $20 \%$ $10 \%$ $0 \%$ |  | Busines | ss Ma | anageme | nt (PL <br> 55\% | 0 6) | 59\% | $\%$  <br>   <br>   <br>   <br>  $0 \%$ <br>  Winter <br> 2023  <br>  $0 \%$ |


| $50 \%$ of B. Tech students in their final semester will sufficiently meet expectations based on a standard rubric. | Final Exam Case Analysis GENTECH 4FT3 Strategic Management (culminating course for all programmes). Uses the Departmental rubric. <br> Summative <br> Internal <br> Direct | Fall 2019: 59\% <br> Fall 2020:53\% <br> Fall 2021: 64\% <br> Fall 2022: 44\% | Expectations were met. <br> Expectations were met. <br> Expectations were met. <br> Expectations were NOT met. | Ensure more comprehensive feedback by TA on case analysis worksheets to prepare students for final exam case analysis in future course offerings. | Business Management (PLO 6) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{aligned} & 100 \% \\ & 90 \% \\ & 80 \% \\ & 70 \% \\ & 60 \% \\ & 50 \% \\ & 40 \% \\ & 30 \% \\ & 20 \% \\ & 10 \% \\ & 0 \% \\ & 0 \% \end{aligned}$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 59\% |  |  |  | \% |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | 44\% |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 0\% |  |  |  | \% |  | \% |
|  |  |  |  |  |  | $\begin{gathered} \text { fall } \\ \text { 2919 } \\ 59 \% \end{gathered}$ | $\begin{gathered} \text { Winter } \\ \text { Norar } \end{gathered}$ $0 \%$ | Fall 2020 $53 \%$ | $\begin{array}{\|c\|} \hline \text { Winter } \\ 2021 \\ \hline 0 \% \\ \hline \end{array}$ | fall 2021 $64 \%$ | $\begin{gathered} \text { Winter } \\ 2022 \\ 0 \% \end{gathered}$ | $\begin{aligned} & \text { fall } \\ & 2022 \\ & 44 \% \end{aligned}$ | $\begin{aligned} & \text { Winter } \\ & \text { 2023 } \\ & 0 \% \end{aligned}$ 0\% |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Program Admission Data



## Graduation Data



Co-op Job Placement Data


