# Integrated Engineering (IE) Meeting – Specialist Team Progress Report

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| **Team Name** | Team 19 |
| **Represented Engineering Disciplines** | CS-EEE |
| **Report compiled by** | Vu Ngoc Dung Luong |
| **Reporting period** | Workshops 4 & 5 |
| **Section One: Summary** | |
| After consulting the PGTAs during the workshop, we have done some minor modification to our pseudocode and circuits and we’ve got everything working as expected. Our team have decided to create an application running on laptops/PCs because the readings will be taken via serial (USB) and we are now designing the GUI (Graphical User Interface) whilst waiting for the engineers from other disciplines to provide us with any additional actions they need our system to do. | |
| **Section Two: Stage of Design** | |
| All of our sub task teams have got their system working as expected, we are now designing a GUI (Graphical User Interface) that is easy to understand and navigate without displaying too little or redundant information, which we will get feedback from our PGTAs in order to improve it after which we will then get feedback from engineers from other disciplines. After which we will start implement all systems together.  Our pH system right now can take any pH value input from the user (the BE-CE) and the pH probe will measure and the pumps (acid or base) will be activated for a certain amount of times until the desired pH or until the cup is full. We are certain that the process is not that straight forward, therefore we are awaiting additional instructions from engineers from other disciplines whilst designing the GUI with other sub task teams in CS-EEE specialists team. | |
| **Section Three: Achievements and Set-backs** | |
| Our sub task team has managed to overcome some problems related to the circuits after taking a detailed look at it with the PGTAs.  We worked out how the pH probe and certain serial commands work after seeing a pattern of the strange values displayed.  On the other hand, we also come across some obstacles that might render the system unstable. Our pumps work but they vibrate a lot which is not ideal to place near a plastic cup or even the container of base and acid.  Another problem is the transfer function, that function requires the solution temperature (which up until now we are assuming room temperature in Kelvin) but there is heating component in the system so we are going to try and implement our systems together first. | |
| **Section Four: Meeting Notes.** *Use this section to record notes during the meeting* | |