I. Define a Topic in Engineering

Presume you are interested in writing a paper on *Robotics*. You may want to define the scope of your paper by defining what constitutes Robotics.

1. Search for Ideas

If you do not have an idea what constitutes *Robotics*, search and read articles or books on the topic. For example, use *ScienceDirect* online database, set Dates from *2000 to present* to retrieve the most recent information, set terms by using *connector AND* within *Abstract, Title, Keywords* or *Full-Text*. Select Subject, in this case either *Engineering and Technology* or *Computer Science*. Type:

Robotics

You will access articles with varying numbers according to the search choices you made.

OR, you may do a subject search in the Library's online catalog under Robotics.

After scanning through some articles and books, you should be able to come up with preliminary ideas about your topic. You can always talk to your reference librarians in the Reference Area or send e-mails or chat online via the ASK A Librarian service located on the Library's web page. You can also consult your instructor.

2. Narrow or Broaden Your Topic

You may find too much information on your topic. In that case, you may want to narrow your topic. For example, in ScienceDirect you may find 8597 full-text articles under Robotics. You may qualify your search by limiting your topic to a certain area such as car manufacturing or a time period such as 1990 to present or a country such as United States or even a certain manufacturer such as Ford. If you can find only few sources, you may want to broaden your topic by related fields such as Automation, Machine Theory, Space Robotics. For example, you may find 500 articles in Wiley InterScience that can assist you in broadening your topic.

3. State Your Topic as a Question

Stating your topic as a question may help you to stay within the scope of your selected topic. For example, what is the effect of Robotics in manufacturing or research?

4. Identify the Type of Information Needed

The type of information needed depends on the following:

- *Type of Assignment* is this a presentation, term paper, senior project, thesis or dissertation?
- *Amount of Information* how much information is needed for this assignment?
- *Currency of Information* does this assignment require current, historical or a combination?
- *Type of Resources Needed* should the information come from scholarly and professional journals only?
- *Primary vs Secondary Resources* should the information come from primary or secondary sources?
- *Information in Various Formats* should the information come from only print resources or include other formats such as visual/ graphic sources, numeric sources (statistics), audio sources and/or electronic sources?