SENIOR DESIGN PROPOSAL State University of New York at New Paltz / Department of

| State University of New York at New Paltz / Department of Electrical and Computer Engineering | |
|---|--|
| To be completed by the student(s) | |
| | |

| Please type in this template | [] Fall | []Spring | []Summer | 20 | |
|------------------------------|----------|-----------|-----------|----|--|
|------------------------------|----------|-----------|-----------|----|--|

I. Select a project supervisor or supervisors (Check appropriate boxes)

| Supervisor | Area of Expertise |
|-------------------------|--|
| Ghader Eftekhari | Electronics and devices. |
| Julio J. González | Control systems, analog circuits, computer-assisted teaching. |
| Baback Izadi | Digital systems, computer architecture, microprocessor systems. |
| Hassan Kalhor | Antennas, microwaves, power, electromagnetic scattering. |
| Ying Lin | Communication systems, digital signal processing. |
| Michael Otis | Optical Engineering. Embedded systems, computer communications (networks). |
| Damodaran Radhakrishnan | Digital system design, low power design, microprocessor-based design. |
| Faramarz Vaziri | Communication systems, digital signal processing. |
| Mohammad Zunoubi | Electromagnetics, microwaves, antennas. |

II. Select a Team (Check appropriate boxes)

| | Team W | Individual Work [] | |
|----------------------------------|-------------------------------------|---------------------|-----------------|
| | Industrial Team [] (See part II-a) | Department Team [] | (See part II-b) |
| | Company: | | |
| | | | |
| Student's name (& position if | | | |
| applicable) | | | |
| Name and rank | | | • |
| of highest rank person in the | | | |
| team | | | |

II-a. Agreement of supervision by Department Faculty

(To be completed by highest rank person in an Industrial Team)

Substance of this form: A design project executed by a student or students in an industrial team as part of a permanent job, Co-op, or internship, can be considered as a senior design project. However, in this case there must be a written agreement between the industry supervisor and the faculty supervisor clearly providing the latter adequate supervision of students working in the project in all academic-related issues.

It is made clear that the purpose of this form is not to interfere by any means with the relationship employer/employee existing between the Company and the students working in it. Specifically, the purpose of the form is to assign a faculty member(s) supervision and control of the student or students working on the project specifically in reference to the compliance of all academic procedures stated in the Senior Design 1 and 2 syllabi.

Senior Design Teamwork Waiver Form

To the Chair of the Department of Electrical and Computer Engineering:

| Name and Rank | | Name | Name |
|-----------------------|------------------------------|---------------------------|--------------|
| will have full contro | l and supervision of the stu | idents working in this So | enior Design |
| Project as regards th | • | • | • |

II-b. Waiver from working in a Team (To be completed only by a student working individually)

Substance of this form: One of the department's objectives is to provide students with teamwork experience. This objective is initially accomplished through laboratory sessions and course design projects. It is highly desired and strongly encouraged that this teamwork experience culminates with the senior design project. Consequently, a waiver from working in a team will be assigned only in extremely well justified cases.

Senior Design Teamwork Waiver Form

| To the Chair of the Department of Electrical a | nd Computer Engineering: |
|--|--------------------------------------|
| Ι | , request a waiver from working as a |
| Team Member on my Senior Design Project. | |
| Reason for waiver: | |
| | |
| | |
| | |
| | |
| Student's Signature | Date |
| | |
| To be completed by Chair | |
| | |
| Waiver [] Granted | |
| [] Denied | |
| | |
| Chair's Signature | Date |

| III. Select, describe and plan the project to | opic |
|---|------|
|---|------|

Describe the proposed design topic and clearly state the design objectives following the guidelines below:

(a) Describe briefly your design topic:

Explain succinctly what your project is about and what the final product will be

| (b). | In order for your proposal to be accepted, the design topic must include a |
|------|---|
| | least four of the following seven realistic engineering constraints (Check at least 4 |
| | boxes): |

| [] Economic | [] Environmental | [] Sustainability |
|-----------------------|-------------------|-----------------------|
| [] Manufacturability | [] Ethics | [] Health and Safety |
| Social and Political | | |

Explain how your project is going to address the constraints marked above

(c) Consider all relevant engineering standards that apply to your selected project topic.

Identify the standards and explain how your project is going to take them into account

(d) Plot a tentative work schedule. Draw a timetable (Gantt Diagram) for your entire project.

| Task | Semester 1 | | | | | Seme | ster 2 | |
|------|------------|---------|---------|---------|---------|---------|---------|---------|
| | Month 1 | Month 2 | Month 3 | Month 4 | Month 1 | Month 2 | Month 3 | Month 4 |

| #1 | | | | |
|----|--|--|--|--|
| #2 | | | | |
| #3 | | | | |
| #4 | | | | |

IV. Identify contributions of each member of the team

Identify the project sub-topics, responsibilities and contributions expected from each team member.

| Team member(s): | | |
|----------------------------------|--|--|
| Major: | | |
| Project Sub-Topic: | | |
| Responsibilities/ Contributions: | | |

Recommended by:

| Senior Design Faculty Advisor: | Date: |
|--------------------------------|-------|
| Department Chairperson: | Date: |