

Models for Joint University/Industry Collaborations

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ITTC Products

- Students
- Technology
 - Software
 - Hardware prototypes
 - Patents
 - Licences
- Technical reports
- Publications
 - Conferences
 - Journals
 - Workshops



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Direct Sponsored Research

- Conducted by:
 - ITTC Faculty
 - KU/ITTC Students
 - ITTC Staff
- Conducted on Campus
- Monitored by Industry Program Managers



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Typical Project Costs

- Duration: One year
(Prefer two-three year efforts)
- Approximate Cost breakdown (\$100,000 total)
 - Students --> 40%
 - Faculty (1) --> 10%
 - Technical Staff --> 5%
 - Secretary --> 5%
 - Computing/Network --> 5%
 - Travel --> 2%
 - Fringe benefits --> 5%
 - Overhead --> 28% (45% of all direct costs)



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Joint Research

- Conducted by:
 - ITTC Faculty
 - KU/ITTC Students
 - ITTC Staff
 - Industrial Partners
- Conducted at:
 - KU
 - Industrial Site



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Joint Development

- Short term
- Conducted by:
 - ITTC Faculty
 - KU/ITTC Students
 - ITTC Staff
 - Industrial Partners
- Conducted at:
 - KU
 - Industrial Site



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Summer Interns

- KU/ITTC Students at industrial site for the summer
- Academic year continuation of summer's project



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Industry Sponsored Graduate Fellowships

- Student is employee of the company
- Student is full time on campus
- Thesis topic can be jointly selected by the student, faculty advisor and industrial partners, often directly related to company's sponsored ITTC research
- Contractual requirement for student to return to the company upon completion of thesis



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Part Time Degree Program

- Student is employee of the company
- Student is part time on campus
- Thesis topic can be jointly selected by the student, faculty advisor and industrial partners, often directly related to company's sponsored ITTC research



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Industrial Affiliates Program

- Unrestricted (no overhead) donation to ITTC for:
 - The industrial liaison functions, including the annual workshop and faculty visits to affiliate companies
 - To improve ITTC's infrastructure for telecommunications and information sciences research and academic programs
 - Support distinguished visitors from industry and academia
 - Support faculty participation in national and international workshops and conferences
 - Provide scholarships for outstanding ITTC students



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ITTC Industrial Consortium (proposed)

- Support is from:
 - ITTC Industrial Partners
 - KTEC
- Industrial Partners and ITTC Faculty Select Specific Projects to Pursue
- Consortium projects have deliverables



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Others

- ITTC can provide in-house short courses
 - Simulation of Communications Systems
 - Digital Signal Processing
 - Introduction to Communications Networks
 - Wireless Communications Systems
 - Artificial Intelligence
- Faculty Consulting



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Conclusion

- ITTC has a successful track record of working with industry
- ITTC has many mechanisms for joint University/Industry collaborations
- Technology transfer and intellectual property issues will be addressed by Tim Johnson



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