An Indian Student Guide to Tech

Current Version: v7.0 Beta 3

Compiled for

Association of Indian Students

Fall 2011

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Foreword

As the title suggests, this Guidebook is mainly intended to address the needs of Indian students seeking information about Louisiana Tech University ("LaTech" of "Tech", as we call it), and/or considering Tech as their next stop in the journey of their career. A majority of these Indian students hold a Bachelors degree in Engineering/Technology from India, and aspire to pursue a Master of Science or a Doctor of Philosophy program in a particular discipline of Engineering. Thus, most of the contents of this guide are tailored to suit the needs of these particular sections of readers. However, unless obvious or specified, the contents might be generically applied to all other sections of readers too.

I have compiled this Guidebook from my experience as a student at Tech since Spring 2000 quarter. While at Tech, I served as the Founder-Vice President (2000-'01), the President (2001), the e-Coordinator (2004-'05), a Special Officer (2005-'06), and the General Secretary (2009-'10) of the Association of Indian Students; I was also as the President of International Student Association (2003-'04) and a Graduate Assistant in the International Student Office (2005). These positions helped me gain more interaction with incoming students. I have been trying to help answering various queries of students since 2000, voluntarily as well as in responsible positions mentioned above, also grouping together students in Yahoo! Groups 2002 through 2007, and later in other social networking websites such as Orkut and Facebook. I am thus motivated to prepare this Guidebook – not because all this gives me an authority to prepare a guide such as this, but because students need one elaborate resource such as this one, and my positions made me realize this need thoroughly.

I spent several months, if not years, on this Guidebook, updating it since its Version 0 prepared for the Fall 2004, with the view that this resource would reduce most burdens on the part of incoming students. As far as I know, such a resource has never been compiled in the past in any other university, though it has always been very much required by every Indian student that landed in the U.S.A! (Do let me know if you find anything else similar, and I shall be glad to refer and appropriately credit it if I use any information therein.) I intend to insist, and re-insist, that incoming students should make every effort to read this Guidebook fully, particularly *before* asking anyone (at Tech) any questions. Unless your question is highly specific, it is quite possible that the query is addressed in this resource already.

Though I blatantly and nonchalantly claim the credit for compiling this Guidebook, hundreds of students are involved in bringing all the contents to my mind – I did not obviously dream the whole thing in my mind! I thank every individual for the help rendered directly or indirectly, including the new students who shot some of the current FAQ towards us. Particular thanks are however due to Koutilya Buchapudi for his help in gathering information required for the update from version 4.2 to version 5.0 and for incorporating the changes into this resource. Thanks to Bharat Karumuri (Biomedical Engineering) and Prashanth Sabbineni (Chemical Engineering) for updating the Sections 4.1 and 4.2 respectively for the version 7.0. Blame it on only me, however, if the contents are misleading. Blame it on yourself if there were assumptions beyond my words intended to convey. Blame it on the nature of statistics if they change the trend they were following. Blame it on me again, for boring you – the reader – in various ways, while portraying the intent to educate you about Tech. Blame it on you again, if you do not read this Guidebook fully before you landed at Tech. If you find any errors in this Guidebook, or if you have any suggestions for future versions, please write to ais@latech.edu.

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News about v7.0 Beta: Chapters 2 and 3 are updated fully, and Chapter 1 needs some more patchwork. Chapter 4 is partially updated, as noted in the Table of Contents. Chapter 5 is in the making.

1. Frequently Asked Questions

Q. What are the general criteria for graduate admissions at Louisiana Tech University?
A: The following are the cutoff (minimum) requirements/eligibility criteria for admission. If your profile does not meet these, you're free to try your luck but be prepared to not get admitted.

GRE: V+Q of 1070 (CS dept. looks for more, generally around 1150; MSNT program has its cutoff at only 1050)
TOEFL: 80 (iBT)
Backlogs: Not more than 2.
Percentage: Generally more than 60 %.

Q. Oh, I fall short of the University's requirements a little. Will my application be still considered for admission?
A: Only certain relaxations might be possible, as outlined below:

GRE: Applicants for **some** programs *may* be considered even if they have lesser scores (~1000) if they have better profile otherwise. Students applying for terms other than the Fall **might be** able to get in with scores ~1000.
TOEFL: No relaxation of any sort, strictly, ever!
Backlogs: Probably 3-5 backlogs can get through, ONLY if applicants have better academic profile otherwise (such as paper presentations, technical symposia, *etc.*) Please note that profiles with more than three backlogs are generally deemed for rejections!
Percentage: Somewhat lenient, only if backed by better academic profile.

Q. Is this information reliable? Is it official?
A: Please note that this information is <u>not</u> from any official source of information. It has been compiled from the general statistics over a few years, as observed by some Indian graduate students. The AIS does not vouch any responsibility for its correctness or towards conclusions drawn based on this information. **No individual or organization including AIS has any word in admission procedures**; admissions are solely handled by various Departments and Offices in the University.

Q. I have applied to the LaTech. When can I expect any outcome or decision made on the application?
A: The application processing flows in this pattern generally:
<u>Graduate School:</u> Checks for the receipt/availability of all documents in the application packet (including the application fee). Keeps track of the student's GRE & TOEFL scores. Assigns a temporary Student ID (SIN) to the student. Sends the application to the concerned college (College of Engineering & Science, or the COES, for most applicants).

<u>College of Engineering & Science (COES):</u> Sends the application to the HOD/Program Chair of the Department the student applied to. Gets it back from them after a decision is made. Informs the decision to the Graduate School. The Associate Dean/Dean of the College may also take part in decision-making.

<u>Graduate School:</u> Sends out a letter to the ISO, signed by the Dean of the Graduate School, and requests an I-20 be sent.

<u>International Student Office (ISO):</u> Prepares a Form I-20 for the student. Enters the details of the student in the SEVIS database. Dispatches the I-20 to the student along with the admission letter. (Also sends the letters by the AIS, ISA, the Medical History form, *etc.* to the student at a later date). The ISO can inform the status **only if** the admission has been finalized and a request for an I-20 has been sent to the Office by the Graduate School. One needs to contact the ISO if one has to request a duplicate/corrected I-20 for some reason.

<u>Depending on where your application could be, you may need to contact a different office each time you try tracking your application down.</u> The contact information of the Offices listed above is provided herewith:

Office	Phone	Fax	E-mail
Graduate School	2924	4487	gschool@latech.edu
College of Engineering & Science (COES)	4314	2562	gradengr@latech.edu
International Student Office (ISO)	4321	2968	iso@latech.edu

(Prefix all phone numbers and fax numbers "nnnn" as 001-318-257-nnnn)

Q. Can I contact any faculty/staff member regarding my admission, or say, requesting funding?
A: At a stage where you have <u>not</u> secured admission yet, no faculty member generally pays much attention to an e-mail from prospective students, whether your question is regarding funding or admission or anything else. Contrary to the general belief, most faculty members will <u>not</u> (prefer to) have any influence on the admission process. **Do <u>not</u> contact people not connected to your Department, people you are not sure where they belong, people who are high up in the hierarchy (such as the Professors, Deans, or Vice Presidents)!** (Do not blame anyone but yourself if such an e-mail misfires on your own chances for admission!)

In the recent times, it has been observed that academic consultancies in India are providing faculty/staff e-mail addresses to applicants, or are e-mailing faculty/staff themselves. Please note that some of these consultancies are sending the e-mails to people who are **NOT** connected to your admission/academic program/major. Please be informed that **<u>your application and/or studentship</u> *may* <u>face the displeasure,</u> *if any*, <u>of such hasty acts of ignorance</u>**.

Q. Can the Association of Indian Students (AIS), or any student there, find the status of my application?
A: The Federal privacy policy prevents the Graduate School from releasing any such information to anyone other than the student. You may e-mail the Graduate School if you applied for a graduate program, or e-mail the ISO if you applied for an undergraduate program at Tech. If you have applied to a graduate (Masters/Doctoral) program in the College of Engineering & Science (COES), e-mail the COES to find the status of your application. <u>Please understand that the normal wait time for an e-mail reply might be about a week.</u>

1.2 Admitted Students (Prior to Visa)

Q. I received my admission letter. When would I receive my Form I-20?
A: Congratulations! Most students receive the I-20 along with their admission letter. If you did not receive your I-20 yet, do not panic! If the letter you received mentions that one or more documents are required before they can send you the Form I-20, you will have to send them at the earliest to avoid further delay at the Graduate School. It normally takes about 15-20 days to receive the Form I-20 if your application packet is complete in all respects. If the letter does not mention any deficient documents, your I-20 will be sent out without much delay. You may contact the ISO regarding your I-20.

Q. My admission letter says that mine is a "conditional admission". What does that mean? Would I have a problem at the Consulate, or later when I come there? What are the implications of a conditional admission?
A: Do not worry! Students are admitted conditionally for various reasons. (Possibly 50-60% or more students are offered conditional admission each year – it is not uncommon!) **In any case, it would not affect the chances of getting a visa!** In most cases, it is because you might have to enroll for prerequisite courses in your curriculum. Thus, at least some M.S. (Computer Science) students and M.S./Ph.D. (Biomedical Engineering) students are admitted conditionally. In some cases, conditional admission is given only because you have low scores on the GRE. (You would have qualified for an admission with these scores, but they could still be low compared to other applicants for the academic quarter.) Or, it could be even because some of your transcripts and/or the original degree diploma have not been submitted yet, which is not uncommon either, particularly if you applied during your final semester/year of your Bachelor's degree program in India.

Please note that the University might not admit students at all, if there's any major deficiency in the student's profile. Conditional admission is only rarely offered in such cases.

Q. Wait a minute, now… I understand what you say, but what is this about the "C" grade and admission status? How are they linked? Is it not a problem if I have a conditional admission?
A: Do not worry about it too much! Getting an "A" or a "B" grade is easy, if you study regularly and work accordingly. So, forget about a "C"! Even if you were an "average student" in Bachelors, you should have no problem in getting an "A" or "B". What if you get a "C" anyway, because of some problem? Read the admission letter clearly, it tells that you should not get more than a "C" on conditional admission, or more than two "C" grades on unconditional admission. (You would <u>not</u> be deported/debarred if you get more than this! Only your status would change from graduate to post-undergraduate – post-baccalaureate, it is called – temporarily.) **The bottom line is: "Do not panic about a conditional admission!"**

Q. I have got an I-20 from LaTech, but the I-20 does not mention anything about funding. Will I be funded? Can I contact someone regarding the same?
A: Funding, as per availability, will be disbursed to students before <u>or after</u> an I-20 is sent to a student. If you were not funded already, you may still find some source of funding for yourself after you come to the university. If you know that someone else with a similar profile (and same program and major) has been funded, you may contact the College of Engineering and Science (COES) to see if they can reconsider your application for funding. **<u>The bottom line: Students have ample chances of funding even after coming here!</u>**

In the recent past, graduate students are being admitted first and a funding decision is made sometime in June or July, by which time most students may even have received their Form I-20 already! In such cases, a new Form I-20 that reflects the funding is generally issued, and that may help people who are yet to attend their visa interview.

Q. My admission is processed but I didn't get my I-20 yet. And, my visa appointment is fast approaching…
A: E-mail the ISO and request them to send you a scanned copy of the I-20 by e-mail. Students have, in the past, attended the visa interview and procured a visa too with an I-20 printed out from the scanned copy. (See below if you wish to get your Form I-20 sent to you by express mail services such as courier mail or speed post.)

Q. I received my I-20, but I later received an e-mail offering an assistantship. What do I do?
A: First, respond to the e-mail accepting the awarded assistantship. **If you do not respond in time, the offer may be revoked!** If you receive the assistantship award letter as a hard copy, you may have to sign it and fax it to the College of Engineering & Science. Even in this case, it is always recommended that you send your acceptance through e-mail also, requesting an acknowledgment of receipt of the fax.

Q. I received my I-20, but I later received an e-mail offering an assistantship. I also e-mailed them asking them to send me a new I-20, since I still need to attend my visa interview. When can I get the new I-20?
A: Please note that the new I-20 is not always sent out. In case you receive an e-mail response to this effect, do request the College of Engineering & Science to send you a scanned copy of the award letter and/or some kind of official confirmation of the assistantship awarded to you, mentioning clearly that it would support your visa application better. If they do send the scanned copy of the award letter, print it on an executive bond paper with a color laser printer (and it would then be "original enough" in appearance). Mention in the e-mail, so that there is transparency of information, that this is what you intend to do for your visa application.

If the College is planning to send out the new Form I-20, ask them how long it might take. You may also contact the ISO, since the new Form I-20 is generated there and is sent from there. As mentioned above, you may also request them to send a scanned copy of the new I-20 for use at the visa interview (as a printed out copy).

Q. I have received my admission, but I do not have much time for my visa. Can I get the I-20 by courier mail or speed post?
A: Yes, once your admission is finalized, you may request for expedited shipping of your Form I-20. You would however need an international credit card (valid/usable in the U.S.A.) for this purpose. E-mail the ISO the details of the credit card and request them to send the I-20 by international courier mail. Please note that this mode may cost you about $50. (Regular mail is done for free and usually takes 7-15 days, whereas expedited shipping takes about 3-7 days.)

Q. I have got my I-20 and am now going to get my visa stamped for Louisiana Tech....
A: All the best and best of luck! Be informed – it is the law that you need to be a registered student at the Louisiana Tech for at least one academic term before you can transfer to another University once you are here. Revise your option to go for the visa stamping with this University,

if you plan to transfer right away. It is always wise to decide your University before you leave India. (See Section 1.4 for more information.)

Q. Can someone help me prepare for my visa interview?
A: The Association cannot directly help in this matter. However, we provide a few pointers. Check websites like http://www.i20fever.com/ or http://www.redbus2us.com/ that provide resources for the same. (Please note that the AIS does **not** particularly endorse any of these websites or the content therein!) Also, there is an Orkut Community where current and new students exchange information.

Q. I am supposed to fill some I-901 (SEVIS) form. What do I do with it? What is it about? And, how do I fill it?
A: The instructions for the form are clear in this regard. According to the form, since you are an F-1 student, you would need to pay $100 before your visa application is reviewed. All details are in the instructions.
The form may be downloaded from here: http://www.ice.gov/doclib/sevis/pdf/I-901.pdf (instructions included therein).
More information about the form can be obtained from the official FAQ page for the same: http://www.ice.gov/sevis/i901/faq.htm

1.3 After getting an F-1 visa

Q. I have got my F-1 visa stamped with an I-20 from Tech! What should be my next step?
A: Congratulations! We welcome you to join us. Read this Guidebook fully to get all your queries in various regards cleared, and then if you still have any questions, e-mail us at ais@latech.edu. **The AIS can answer nearly all your queries** and shall request the students to respond if the bulk of e-mails we receive is too heavy. **Do not contact more than one student AT ONE TIME**. Remember you are taxing two or more persons at the same time when you contact all of them at once, and worse, ask the same questions! We do understand the anxiety of prospective applicants/students and shall be as prompt as possible in replying. We remember that we were in the same boat a few years ago!

Q. Do I need to get a Social Security Number (SSN)? When and how can I get it?
A: You will not require SSN before coming to the U.S.A. One may obtain an SSN only if one is "working". In student context, "working" refers to having an on-campus job or assistantship. (These are the only legal ways of working in the U.S.A., at least during the first 9 months of your stay, after which you may obtain permission to work elsewhere.) You would get the necessary paperwork at your place of employment (particular office at LaTech) and at the ISO.

Please be informed that **your SSN application shall delay in processing if you apply for it within the first three weeks after you landed in the U.S.A!** This might sound strange, but please do remember this when you apply! (SSN processing generally takes 2-4 weeks in any case.)

Q. What do I lose if I do not have an SSN? Or what do I gain by having one?
A: This is something that is not easily explicable at this stage. Getting an SSN as early as possible is necessary; most official business in the U.S.A. runs based on SSN, as that is a unique

identification for an individual. SSN would be the primary id for what is called one's "credit history"; a good credit history is constantly necessary while you are in the U.S.A.

1.4 Change of Plans

Q. I have got an I-20 from Louisiana Tech, but I wish to attend another school where I have got an admission…
A: If you have made this decision before going for your visa, good! And, if you are thinking about this, be informed that you do not need to inform anyone at Tech that you are not attending this school. Just go ahead with your plans. Good luck to you anyway! (Chapter 3 of the Guidebook may still be useful to you, but ask Indian students/Association at your school to know its applicability there.)

If you wanted to go to a different school after getting a visa with an I-20 from Louisiana Tech, please be informed that you are required to attend Tech for at least one academic quarter before you can transfer to another school – this is the Law! Some schools work around this law, but fortunate or unfortunate, Tech abides the Law.

Q. My case is a bit different… I have an I-20 from Tech, but I have got my F-1 visa to a different school, and now I want to come to Tech. Can I not directly come to Tech?
A: As outlined in Section 1.2, the Federal law says that a student who has obtained visa to go a particular school <u>cannot</u> transfer to any other school without attending the school (for which visa was obtained) for at least one academic term. Nevertheless, some schools do not stringently follow this law. (It was already mentioned that Tech follows this law.) Such schools might be ready to release your SEVIS data, so that the school you actually want to go to can re-register you with a new SEVIS number. Though Tech does not release students' data this way, Tech does generally accept such students whose data may be released by another school.

The first thing you should do is contact the International Students Office (or an equivalent) in that school and present them your situation. Then, if that school is ready to release your SEVIS data, contact the ISO at Tech regarding this, and see if they agree to re-register you in SEVIS. If both schools agree, then **you first need to go to the school you got a visa for**, and get your transfer request processed by the International Students Office there. After the paperwork has been processed and faxed/mailed to the ISO at Tech, you may come to Ruston directly and go to the ISO at Tech, where a fresh I-20 will be made for you. (You may get the transfer form by hand and come to Tech directly from that school, if you already contacted ISO at Tech.) Again, remember, **you would be considered an illegal immigrant if you do not go to that school first!**

Q. I am admitted, and I have even got a visa to come to Tech, and I am planning to come to Tech. But, I want to change my major now. What should I do?
A: It is possible to change your major **only after** landing here. You will have to file a fresh application for the major you would like to change to; application fee is not required. **You cannot change your major for/during the first quarter itself.** Your admission to the new major is subject to your commitment towards your coursework, your grades, and approval from the Graduate School and the concerned Department. One cannot guarantee a change of major; rejections are not frequent, though not uncommon.

1.5 Preparing for *The* Journey

Q. How can I plan my itinerary? Is there a preferred route?
A: There is no preferred route or airline. Just choose which is economical, while also meeting any specific requirements/stoppages you might prefer. Sometimes, certain airlines may offer provision for extra baggage. Enquire about such options first, since you may need that extra space. The usual options sought after are Delta Airlines, KLM Airlines, British Airways, and Lufthansa. There are also several other options such as Air France, Air India, Singapore Airlines, Air Lanka, Emirates, Qatar Airways, etc. **The AIS does not particularly recommend any airline** – you may just take whichever is convenient and/or economical for you. Students generally approach travel agents to get their tickets booked, which is probably the wisest thing to do!

Make sure you fly into Monroe, Louisiana (Airport Code: MLU); that is all you should really be concerned about.

Q. When should I come to Tech?
A: Below are the suggested dates for each academic quarter. **Please do not come much <u>before</u> these dates**, unless you have some pressing reason to do so. There is not much for you to do here really; generally, <u>you cannot even apply for on-campus jobs/assistantships until the start of the academic term</u>. Spend with your family and friends as much as possible – remember that you may not be able to go to India for at least about one-year-and-one-half after you come to the U.S.A!

Suggested dates of arrival:
    Fall: August 25 or later, but before the reporting date on the Form I-20 (Field #5)
    Winter: November 25 or later, but before the reporting date on the Form I-20 (Field #5)
    Spring: February 25 or later, but before the reporting date on the Form I-20 (Field #5)
    Summer: May 25 or later, but before the reporting date on the Form I-20 (Field #5)

Q. I have friends/family in the U.S.A, and I want to visit them after I come to the U.S.A. Can I do that? Should I first come to Ruston and report at the school?
A: You may very well visit your loved ones in the U.S.A when you come here. The most preferred/suggested way is that you land nearer to their place first, spend your time there, and fly from there to Monroe. Wherever your folks are, you would not have any problem at the port of entry or anywhere; you would not even be questioned by anyone as to why you chose a port of entry so far from your school. Unless you have someone coming by road to meet you in Ruston, do not plan to fly to Ruston (Monroe) first. This is financially burdensome and also tiresome. If you thus come to the U.S.A well before you come to Monroe/Ruston, try to inform us the same, along with a phone number in the U.S.A where you might be reached.

Q. What can I bring when I come there, and what not?
A: Chapter 3 is a consolidated list of things to bring. **Remember to maintain your baggage within the weight limits as required by the airlines you travel.** Otherwise you may have to pay huge sum after you arrive here (at the port of entry). Usually, the limit is 23 kg (50 pounds to be exact) each, in two suitcases, and 8 kg in a cabin bag. (There are fixed standards for the size of this bag too!) **<u>It is always recommended that you should check with the airline authorities to know about particular luggage limitations</u>**, since these are frequently changed by several regulations.

Remember always: BE CAREFUL with ALL your documents all through your travel. The following documents are quite important for a peaceful stay in the U.S.A:

- Form I-20
- Passport
- Demand drafts, Travelers' Checks, and currency
- Other important documents, such as previous academic records
- Form I-94 (This form is given to you in the flight, before disembarking in the U.S.A. Once you are at Tech, the ISO staples it to your passport. Do not ever remove it! This document is more important than the passport itself!)

Q. I plan to get my mobile phone from India. Is that advisable?
A: Please be informed that not all mobile phones from India work here since the operating frequency might not be supported! Also, in the U.S.A., usage charges for a prepaid mobile are a lot expensive, while post-paid plans are generally available with decent and state-of-the-art phones for low cost or for free! In any case, getting a mobile here is not recommended. If you do plan to get a mobile phone at least for emergencies, ensure that it's a "quad-band" phone (meaning that it can operate at 850/900/1800/1900 MHz); some tri-band phones *may* also work in the U.S.A.

Q. I have got a form titled "Medical History". What should I do about it?
A: The University mandates that the form should be filled and sent to the University before you step into the U.S.A. The form reads that you should "print" the information in there, which only means that you fill it in uppercase (capital) letters. The form is also downloadable from http://www.latech.edu/documents/medical_form.pdf

The Medical History form should be filled in and attested by a qualified doctor. You may also fax the form to +1-318-257-3927 (Student Health Center). Remember to finish all these formalities to give ample time for it to reach the University before you actually arrive here. **If you cannot send the form before you come here, do not forget to get it along with you!**

Q. What vaccines do I need to take, by the way?
A: The Louisiana State Law requires you to get vaccinated for Mumps-Measles-Rubella (MMR vaccine), Tetanus-Diphtheria (Td vaccine), and Meningitis. It is always better if you get vaccinated for other diseases like Hepatitis-B, but that is optional.

Also, be informed that two doses of MMR vaccine shall be required – the second dose needs to be taken one month after the first; please note that both the doses of MMR vaccine must be administered after the first year of birth. If you have time for only one dose before you leave India, you may then have to take a second dose after you come here; the Student Health Center charges you nominally ($10) for one dose. You may get the second dose in the first three months (one academic quarter) here, but be sure you get at least one dose before you leave.

The Student Health Center currently seems to insist on the MMR vaccine alone, though the other two (Td, meningitis) are also listed as mandatory vaccines for all first-time students at Louisiana Tech University. While the Td vaccine is only nominally priced at $10, please note that the meningitis vaccine is a whopping $90. Thus, we strongly suggest getting the meningitis vaccine in India, so as to avoid the possibility of spending $90 for the same after coming here.

Q. Okay, but where should I take the vaccines?
A: Any registered medical doctor can administer the vaccines in one's (authorized) clinic and certify the same. Most students from Andhra Pradesh prefer to get the vaccination done from the Institute of Preventive Medicine (IPM) in Hyderabad. If you wish to do the same, you may make an online appointment at http://results2.ap.nic.in/vaccination/ and proceed accordingly. (Similar government institutes may exist in other regions of the country.) If you are not getting your vaccinations from the IPM, a certificate on the doctor's official letterhead will also be fine. In any case, ensure that you carry the Vaccination Certificate in original, when you travel.

Q. My doctor and/or my family say(s) that I had been given a dose in infancy/childhood and that I cannot take a dose now. How do I go about it then?
A: The medical experts here in the U.S.A. advocate that one needs to get all the required vaccinations done after one is at least 18 months old. (Your doctor may tell differently though.) If you had taken MMR and/or TD in your childhood, please be sure that the doctor's certificate about the vaccine indicates an "acceptable" date. Or, you may get two doses of MMR again anyway, which is not generally a problem. **Make sure that the proof of immunization indicates two doses of MMR vaccine administered to you after an age of 18 months** – that is the bottom line.

Q. My travel agent mentions "port of entry" all the time. What is it anyway? Can/Will Monroe be my port of entry?
A: Monroe cannot be your port of entry since it is not an international airport. The first place you land at in your destination country is called the "port of entry". Here, you check out all your baggage. (You would not need to check your bags anywhere before the port of entry, once you board an outbound flight from India. Your baggage follows you without your intervention, only till the port of entry.) **Even if your bags are checked until a later destination, your bags must be claimed in your port of entry without fail.** You would face the Department of Homeland Security/Immigration/Customs authorities at the port of entry. You would need to go through some major formalities here, like the customs check of baggage, getting the Form I-20 stamped, getting fingerprinted, etc. **You will receive instructions regarding other formalities while in the plane** before you reach the port of entry. (Listen attentively! And, if you do not receive any instructions on how to fill the forms, ask co-passengers and/or the flight attendants.) You may have to wait at the port of entry for a few hours for your connecting flight to your destination. **See that there is a minimum gap of 4-5 hours before your connecting flight out of the port of entry**, to be on safer side. Formalities at the port of entry consume more time than normal, with many students landing around this time of the year. Hence, plan properly rather than miss your connecting flight and cause trouble and tension to yourself and others. **Remember to carry your baggage all by yourself** (not literally, of course) **from your port of entry** to your final destination. You may have to spend $4 for a cart/trolley (Smart-Carte, it is usually branded as) at the port of entry – **have $1 currency notes handy**. (See section 3.4 about "Money".)

Q. What is this Immigration Clearance at the port of entry?
A: The first thing you need to go through at the port of entry, after landing, is the immigration and customs clearance, after which you may board a domestic flight to reach your final destination. Before getting down at your port of entry, while you are still in the plane, you will be given two forms to fill up – **Form I-94** (a long, white form) and a **customs declaration form**. **Please keep the Form I-94 document very safe. It is more important than your passport, and you are required to keep it safe as long as you are in the U.S.A.** On alighting from the plane,

you may ask people or follow signs to get to the Immigration Clearance. **Keep handy your passport, and the customs clearance form and the Form I-94** that you filled inside the plane. Generally, you do not have to declare anything. (That is, you write that you are getting dutiable goods of "zero" value; of course, if you are getting any dutiable goods, declare, and if you are not sure, ask someone.) Once you hand over the customs clearance form before reaching the counter for Immigration Clearance, **keep your Form I-20 handy, along with your Form I-94 and the passport**. There can be **a long queue** at the Immigration Clearance counter. If you do not have a lot of time for your next flight, request the people in the queue or the Department of Homeland Security staff at the queues – you may be able to bypass the queue. (If you are a group of people, it is, of course, not fair to ask to let the whole group by pass!) At the counter, present your passport, Form I-20, and Form I-94. Both the Forms shall be duly stamped and returned to you. **Only one part of the Form I-94 will be returned, and this is the part of the Form that you need to carefully keep with you until you leave U.S.A!** You might be asked some questions about what things you are bringing, *etc.* <u>Do not lie</u>. Give factual information to the Immigration Officer. Remember to identify, collect, and check out your baggage at the port of entry.

You might essentially need your Passport, Admission Letter, Form I-20, Form I-94 (after you receive it), and Vaccination Certificate (issued by your doctor) when you disembark at the port of entry. Keep them all handy, on your person. It is safe to <u>carry by yourself your cash and monetary instruments</u> (drafts, checks, *etc.*).

Q. Will someone pick me up at some place when I land at my destination?
A: <u>There is no "easily accessible" public transport or University transport from any airport to Ruston</u>. However, the AIS can arrange a pickup for you, from Monroe airport or the local bus terminal, if you send us your complete travel itinerary. You may choose to send your itinerary by e-mail to ais@latech.edu or use the online pickup request form at the AIS website http://iso.latech.edu/ais/. **Please send your complete itinerary <u>at least</u> one to two weeks before your impending journey.**

The Association essentially needs the following information if you choose to send an e-mail:
- Date of Arrival in Monroe **(NOT the date of departure in India)**
- Time of Arrival of the flight (the ticket mentions the local time of arrival – that is what we need)
- Airlines/Flight number

<div align="center">OR</div>

- Date and time of arrival at Ruston Greyhound bus terminal (If you are arriving by bus from elsewhere in the U.S.A, you can travel to Ruston.)

Be sure to fly to Monroe (**Airport Code: MLU**), which is the only place from which the AIS can arrange a pick-up (or the local bus terminal, of course). **<u>Students are required to pay the student who picks up a nominal sum of $25 for the pickup</u>** from Monroe airport or $5 for a pickup at the Ruston (Greyhound) bus terminus. **Pickup from another nearby airport, Shreveport (Airport Code: SHV) is NOT at all guaranteed, and may cost up to $60 even if sometimes arranged by the AIS.** Ruston is not well-connected by railroad; there are no passenger trains that stop in Ruston. (The nearest railway station is Bossier City, near Shreveport.)

Q. What if I miss one of my flights and cannot reach Monroe by the time I mentioned in my itinerary sent to the AIS and/or the ISO?

A: This is possible, yes, particularly if the formalities at the port of entry take a longer time. In such a case, **call any of the phone numbers below and pass on the message at the earliest!** Please remember that **the student who comes to pick you up leaves Ruston about one hour before the arrival of the flight in Monroe, and not all students that go for a pickup will have a mobile phone**. **If** you miss a flight and **we do not know the information**, we still send a person to pick you up, and **you would then end up paying $60 instead of the regular $30 for the pickup!**

- Abhilash Thallapally (President, AIS): (225)209-4835 (Mobile)
- Ms. Joy Chakraborty (Coordinator, ISO): (318)607-6883 (Mobile); (318)257-4321 (Office)
- Mr. Daniel Erickson (Director, ISO): (318)251-1630 (Home); (318)257-4321 (Office)

Remember to carry these phone numbers with you when you embark the flight in India! If you reach an answering machine/voice mail of any of the above when you call, leave a message and try to reach another person in the list. When calling any of the ISO officers listed here, please exercise some courtesy and call them only if you think you can call them at their home/mobile numbers. After you reach one of these people listed, **do not** call anyone else *again*!

When you miss your flight, go to the airline carrier counter (for the flight you missed), and ask them to send you on the next available flight. You would not need to pay a penalty for the rescheduling of flight(s). If you have to catch a different flight from the destination of the missed flight, tell them the same and ask them if you can be re-routed so as to still catch that flight. (Re-routing can be done through a different airline carrier too – you just need to ask them earnestly!)

If this happened **after** you checked in your bags into the flight that you missed, tell them clearly, and ask them how you can contact the destination airport and inform them, so that your luggage is not destroyed by the time you reach. (**Unclaimed baggage is destroyed after a considerable wait time, in most major airports! So, it is important that you take care of your luggage at every stage.**)

Q. Now, how do I make a phone call?! Is there some place in the airport that I can call from?

A: All airports have public telephones at various locations. **You would need money in small change (coins) to make a phone call.** If you have currency notes, you can probably get some change in any store in the airport or at counters that sell foreign exchange. Some airports also have wall-mounted machines that give you coins if you deposit currency notes – look around, or ask someone. **Even if it might cost you a bit, please understand that you would save a lot more money** (see above) **if you call!** If you have friends/family in the U.S.A, you may ask them to buy you a calling card for calling within the United States, and ask them for information on using the same to place a call. Remember to get the calling card before you leave India, and carry the details of the calling card with your essential documents (and do not just leave it stored in an e-mail!)

Please note that a call from Monroe airport to Ruston would be a free local call – you may place a call from the Airport Police and/or from any airline terminal to any of the above numbers.

1.6 At Tech and in Ruston

Q. Can I know in detail about assistantships and on-campus jobs at the Tech?
A: An on-campus job or an assistantship generally suffices to meet your monthly expenses. Depending on how much you are paid on an assistantship, you may be able to save a few tens to hundreds of dollars a month.

Assistantships pay anywhere between $300-1000 per month, both extremes being <u>very rare</u> (for MS students<u>)</u>. Assistantships are generally for 10 hours per week (as on paper), and involve research or 'teaching assistantship' (mostly limited to grading undergraduate students' answer sheets). When involving research, students are expected to work "as much time as possible", and <u>not just the stipulated</u> 10 hours per week. It is expected that the harder you work, the faster can you complete the research and thus the quicker you graduate. The out-of-state tuition (See Section 2.3) is waived for students that have an assistantship in that particular quarter. This accounts to about 40 % of the total fees per quarter. Fee waiver of any kind is offered only as mentioned here, and only to students that have assistantship in a particular academic term; the University does not offer fee waiver alone, without an assistantship. For most assistantships, particularly those involving research, performance shall solely affect the salary per month <u>and</u> the offer for assistantship itself; **poor performance may result in revoking the offer of assistantship to the student**.

An on-campus job pays at the rate of $7.25 per hour, and the job is for 15 or 20 hours a week. Thus, the pay would be $435-580 per month. Most commonly available on-campus jobs are with the University Police Department (Tech Police) and the Cafeteria. Tech Police offers only 15 hours per week while the school is in session. Tech Police student worker positions generally involve scouting a designated campus area or a building. Cafeteria does not generally have too many vacancies but it offers student worker positions for 20 hours per week. Having an on-campus job does <u>not</u> bar you from getting an assistantship. However, **one can only hold either assistantship or an on-campus job at LaTech**, and thus you would need to drop your on-campus job (obviously not the assistantship) when you get an assistantship. Students holding on-campus jobs in the first few quarters can still find faculty members who can give them some kind of research work in their lab, so that they can make an impression upon the faculty members in the quarter they're officially holding an on-campus job; they might eventually be offered an assistantship in the subsequent academic quarters.

Q. Do I pay any taxes as a student?
A: As may be understandable, you file taxes only when you earn something, *i.e.* through on-campus jobs or assistantships.

Students earning less than about $8000 a year <u>need not</u> pay any taxes. (This amount changes each year. You'll be informed of it.) All the taxes deducted during the calendar year may be <u>re-obtained</u> by filing (federal and state) IT returns before the end of the fiscal year (in April each year). Thanks to the tax treaty with the U.S.A., Indian students may choose not to deduct any amount from their monthly salary. Though the university did withhold taxes in the past as a default option, the Personnel Department now seems to not withhold by default. It may still be wise to request a tax withholding (generally less than $50 each month, federal and state taxes included) since the deduction per month is meager but the tax refund as a lump-sum would be a considerable amount at one time of the year.

Q. What are the expenses I might incur while at the Tech?
A: See Section 2.3 regarding the fees at Tech. A monthly expenditure of $250-300 is a fair sum for living expenses. Please understand that one's monthly expenditure can be more or lesser than this amount, depending on the way one would spend.

Q. Can I know something about accommodation? Should I stay on-campus? Do I need to reserve my accommodation in advance?
A: The University has dormitories on the campus. However, all graduate students from India stay off the campus, in apartments around the University buildings. You do not need to book your accommodation in advance if you are staying off-campus like all other Indian graduate students and some undergraduate students.

Off-campus apartments are not really far from the University buildings, as the city is small. Bicycle is a convenient mode of conveyance for students, but most of the students walk to the campus (it is really quite near!), and more than a few Indian students do have cars.

Each apartment is shared by a few students; the number of allowable students in an apartment is dependent on the lease agreement between the owner/realtor and the resident students (and the size of the apartment, of course).

When new students arrive at Tech, **the Association sees to it that they are temporarily accommodated in apartments of current Indian students** for a week or so, usually until they can find an apartment for themselves. So **do not worry about your initial accommodation.** You would not generally need to pay for your initial accommodation, but be courteous and helpful to your hosts. The AIS can only suggest the students regarding the housing information but cannot help everyone get an apartment. However, you are bound to get an apartment eventually, do not worry!

Q. Do I need to report to any Office or an official about my arrival in Ruston?
A: Actually, no! However, there are certain formalities that you would need to complete with the International Student Office (ISO) upon your arrival. Go to the ISO at the earliest, with the help of a current student if necessary, and complete the formalities.

Q. I am visiting my relatives/friends first and am coming to Ruston from there. Should I still contact the ISO upon arrival?
A: Actually, yes! The International Student Office gets a list of LaTech students within 7-10 days after they enter the country. If you intimate them of your arrival into the U.S.A., there shall be no confusion as to why certain student had landed but had never come to the Office. Thus, it is necessary that you intimate the AIS and/or the ISO of your intended arrival in the U.S.A., even if you are making your own travel plans to Ruston on a later date; the AIS exchanges information with the ISO and thus contacting the AIS will also avoid the confusion.

Q. I saw that LaTech operates on academic quarters. How is this quarter system like? What is a (semester) credit hour?
A: The academic year is divided into four quarters, *viz.*, Fall, Winter, Spring, and Summer. The duration for every quarter is almost the same, i.e., 10-11 weeks. (Summer quarter is a bit different.) This is a rather tough system here since you get "semester credits" for that. A semester credit hour (SCH), or simply a "credit", is approximately equivalent to one hour (nearly

1:15 minutes) a student devotes in the classroom on that course per week, *i.e.* a course with 3 credits requires the student to spend about 3 hrs 45 min in the classroom in each week during the academic term. Obviously, the quarter system with semester credit becomes more hectic since the "semester" syllabi are compressed to 10-12 week duration (as opposed to the usual 18-20 weeks in a semester)!

The advantage of the quarter system here at Tech is that you can complete your coursework sooner (completing a minimum of 21 SCH per year, if you enroll for Summer quarter). Also, if you transfer to some other university for any reason, the credits are considered equivalent to the credits earned in a semester system.

Q. How soon can I access the Internet after I land in Ruston? What is the general way of accessing the Internet/PC on the campus (or off the campus)? Is late night access possible?
A: Request a current student that accommodated you and you should be able to access it almost immediately. Internet can be accessed in the University's 24-hour computer center. Of late, laptops have become more commonplace among Indian students. You may decide to buy one after coming here, but a computer of your own is **not** an absolute necessity since there're several avenues even otherwise. If you have your own computer at home, you may dial-up to the university for free, or use a paid Internet broadband (cable/DSL) connection.

Q. So, do I really need a laptop while I am there? I already have one and so can I bring it? If not, do I buy one from here?
A: The University has enough computing facilities and thus having a laptop is not absolutely necessary. However, most students tend to buy a laptop during the first few months at the university. If you already have a laptop in India and if it would not be used in your absence, you may get it here, of course! You may even plan to buy a desktop for a little less expense, if you prefer one.

If you already have an external hard disk, a USB flash drive, or CD/DVDs with your down data, you can bring along for your use here. (Custom-made audio CDs or software may be disallowed to be carried, when your bags are screened at the port of entry.)

Q. Should I be learning to drive a car? Is it advisable to get an International Drivers' Permit (IDP) or my Indian drivers' licence when I come there? Would I need my own car in Ruston?
A: As you may already know, road rules in the U.S.A. and in India are considerably different. (Strictly speaking, most rules are the same but most of us do not care to notice that in India.) Thus, it would be advisable to learn driving after you come here. However, please be informed that Ruston is too small a town and most commute is done on foot; buying a bicycle might be helpful too but buying a car of your own is unnecessary.

All individuals that need to a licence here need a 6-hour long theory class (for about $50) with an objective test at the end of it. You may be able to get an exemption for this class if you bring your drivers' licence from India – this class is essentially to ensure that people have some sense of traffic and driving and thus any licence from any country might just be helpful in requesting an exemption. To help international students coming to Tech, the International Student Office collaborates with a local driving school instructor and that class is conveniently administered on the campus, if you need to take it. **Please be informed that an IDP is not useful to drive in Louisiana.** Most other states do allow the use of an IDP for a few months upon arrival but

Louisiana does not consider an IDP as a valid licence to drive. ("Licence" is spelt as "license" – both as a noun and as a verb in American English.)

Q. What sources of help and/or information may be available at LaTech to help me through my courses and/or research?
A: Please be aware of the fact that it would be *you* who would do the work assigned to you – the faculty member or classmates/colleagues would not always be a primary source of help. So, be prepared to handle the work with your own faculties. Guidance from outside would be very limited; you are expected to do the work majorly by yourself, regardless of your familiarity with the subject! So, choose your courses/work based on your knowledge in a subject and/or interest in a new subject. But, do not panic, because you would generally be provided with all the pointers for the necessary information, and nearly everyone is in the same boat as you are!

In order to make your student life at Tech comfortable, familiarize yourself with resources such as the following, so that your search for information is smooth, when you start working on your courses/research. You can do this while you are still preparing for your impending studentship in the U.S.A!

- Web Search: **Google** seems to be the first step for most search on WWW these days, and it is no different even in the case in point. However, there is a lot more to Google Search than can be seen on the surface! See what all types of search Google offers: Web, Images, Journal Articles (Google Scholar), Patents, Books (Google Books), Blogs, and more! And, Google is only the first step for most people. Another similar but less-used search engine is **Bing**, and it offers nearly all these types of search. Look around and there are probably more search engines and meta-search engines that can come handy. Also check out the "advanced" search options offered by these search engines. (There are several blogs and WWW articles that teach you better ways of using Google or other search engines! Such resources actually give you a lot of search modes you possibly did not know about these engines!) CiteSeer.Com is one such resource as Google Scholar or Scholar Live.
- Wikipedia: This open encyclopedia of the WorldWideWeb is a good source of information, but is not always authentic, since the information can be edited by literally anyone (and it stays on there until some scholar notices and corrects it)! Other encyclopedias can be of help too, if only you can access them online or in a library.
- PubMed: This is a source essentially for students of Biomedical Engineering. Results are not all accessible, but there are free articles available. At least, it helps you hone your search skills.
- LaTech Library: The University Library website offers access to several journal indexes and databases without a user name and password. Browse through the Library website to know more. After you are a student of LaTech, you even have free access to publications from IEEE, American Chemical Society (ACS), Institute of Physics (IOP), and more. Other facilities available through the Library are outlined during the International Student Orientation session at the University – listen attentively and also seek the help of the library attendants for more information – after you come there.
- Hard Copies: In the digital age, these seem to be considered as a last resort. However, please be reminded that most of the resources available online are/were originally published as hard copies in some form in some age! Libraries in India have a lot of good reference resources too – only you should try to familiarize yourself with using a library first!

The bottom line is: **bring yourself to _look_ for information, because information is definitely out there, for most of our needs!**

Q. I almost forgot to ask! Can I take part in the Association of Indian Students' activities? What all activities can there be? Sports? Cultural events? Festivals?
A: Oh, yes, absolutely! We shall be delighted to have you around! In fact, the organization is completely handled by Indian students and volunteers. You may even run for one of the six positions in the organization. (Some of them require you to be a part of the Tech Indian family for as long as 6 months, and thus may not be available to you right away.) And, all our events are volunteer-driven. The AIS organizes one event per quarter, generally, and all these need a large amount of human resources. Yes, there are sports, Indian festivals, cultural events, and more! You are free to bring your own ideas to the table too, of course! At Tech, we are a family! The motto of the AIS is a quotation borrowed from the famous philosopher-writer Bhartru Hari – _vidyaa bandhujanO vidESagamanE_ ("Education is like a family relative during a foreign visit."). We are here as a part of a family, and we need YOU in order to continue the long legacy of the Association of Indian Students. Welcome to LaTech! Welcome to the AIS already! And, do not forget: the AIS works hand in hand with the International Student Office and the International Student Association on several other events (which are put together by international students like us), and you may even be a part of the ISA board of officers.

1.7 Financial Assistance at Tech

Q. In the current scenario, what are the prospects that I get funded at Tech?
A: Quite a number of students could obtain assistantship positions even before they came to Tech, in the last few years. While this is a positive sign, please note that these positions are not offered just like that – one in fact may have to strive hard going around various offices, departments, and faculty members before one gets funded, after coming here! Prepare a résumé (preferably, one-page), format it according to suggestions from current students, and **ask the current students as the standard _modus operandi_** in searching for any available funding prospects. (On-campus jobs have applications in the particular Office, and no résumé is required to apply.) Please, however, be informed that the exact scenario changes with the influx of students for a particular academic quarter, and thus even the approximate wait time for funding is not predictable every time. Also, please understand that the chances also depend on your particular major, and **more importantly on your GRE score**.

Q. If I am not funded at this time, may I be funded later? Or, is all hope gone?
A: It is not to say that no one generally gets funded after coming here. It may also be natural that students who were here before (and are not funded) could be preferred for being funded, but it does not necessarily lessen one's chances to get funded. You need not stick to faculty members of your department while trying to get an assistantship; you may go around other departments too, if you feel a faculty member would have some work that you (or a student of your department) could do. (Please note: Non-CS students shall not be funded by the Computer Science Department.) **Remember, do not go to the faculty members without consulting any of the students who were here earlier!** The AIS tries to conduct an orientation session at the start of every academic quarter to guide new students in such matters. Even if an orientation session is not conducted, any current student can help you out, **you have to ask**! Consult a student before you take a step, especially when dealing with official matters. **Obtaining funding from**

faculty members would not be easy; be ready to work in the field of your interest (or change your field of interest and work) for no pay for at least one quarter.

Q. So, you say I can take up any position outside my own major? Would someone help me learn the new subject/work?
A: Faculty members outside your department may also fund you, but be aware of the fact that it would be *you* who would do the work assigned to you (and the faculty member himself/herself, and not someone who might suggest you to approach a particular faculty member, even if one is a prospective colleague in the laboratory/office). So, be sure first that you can handle the work with your own faculties before simply accepting the offer. At the same time, please also be aware that you would indeed have to learn new subjects and new concepts even within your major. For example, all students working in microfabrication/nanotechnology would have to deal with chemistry at some point of time, if not majorly! And, guidance from outside would be very limited; you are expected to do the work majorly by yourself, whether you know it or not. So, choose your work based on your knowledge in a subject and/or interest in a new subject.

Q. I tried to contact a faculty member but got no response. How long should I wait?
A: Without an intention to discourage, and only wanting to present a frank opinion: **Not many professors reply to you or correspond with you (regularly)** – all they might say (<u>if</u> they reply) is "Come here, and meet me when you come here, and we can discuss the possibilities at that time." And also probably "I do not need any students at this time. I cannot tell you now if I might need students for Fall." This is not to blame any faculty members but is only to give *you* an idea. You are, of course, free to try contacting faculty members. **<u>Be formal when you do, and thus, do not use the "common e-mail/chat/SMS style of writing"! Check grammar and spellings before you send the e-mail.</u>**

Q. Am I eligible to get any student aid (such as FAFSA) or student loans in the U.S.A?
A: Unfortunately, foreign students are not eligible for FAFSA, at least in the first five years during their stay in the U.S.A, which generally means that one would never qualify for it. With student loans, you have some luck there, in that foreign students are eligible to obtain student loans, but there is a catch here: your loan approval is based on surety by a permanent resident or a U.S. citizen.

Q. If I need more money to be brought from India at a later time, what are my options? And, what if I want to send any excess amount back to India after getting my own funding resource at Tech?
A: Wire transfer to your bank account in Ruston is an option that would cost you a flat fee of $15 per transaction for transfer from India and $40-45 for a transfer to India. (These fees are apart from what the local bank in India may charge the sender). Less expensive options do exist. Money Order Videsh is offered by India Post for receiving/sending money to/from India; the transaction fees can be deducted at either end. Instant money remittance services such as MoneyGram and Western Union are available in Ruston and in several locations in all major cities and towns in India. If you wish to send money to India, these services are available, and http://www.sendmoneyindia.org/ lists more options. (Not all options may be applicable or valid.) All these options have limits on the total amount that can be sent/received per transactions, and additional limitations may be enforced. This is only for your information and the AIS does not endorse any of these businesses.

Q. What is the job scenario for Tech graduates in general?
A: Logically, this question should appear in Chapter 4, specific for each major. However, there are some general aspects concerning this query and it is thus answered here.

Of late, students from nearly all majors are, fortunate or unfortunate, choosing the IT bandwagon as their pit stop for jobs. Thus, it is becoming exceedingly difficult for us to come up with a "trend" in predicting the job scenario for a particular major. If you are really interested in sticking to your core field of study/research, and if you would continue to be so after staying here a while too, we are sure that you would know the picture better than we can ever tell it.

As a general statement, ***not* many graduates of Tech needed to change their line of work to IT**, except by personal choice. In other words, those students who decided to look for jobs in their field of study (and not in IT, unless *it* was their field of work) did get jobs sooner or later, in nearly all of the cases!

1.8 More Help

Q. Oh, this is the end of the FAQ?! I have a lot more queries to ask...
A: It is natural! All of us here passed through more or less the same stage when we were planning our first trips to Ruston. You have the Association of Indian Students (AIS), the International Student Office (ISO), and the International Student Association (ISA) to clarify your queries and guide you through the process. Feel free to send your queries through e-mail to the AIS, ISO, or the ISA. If you want to save yourself from confusion, **do not contact more than one student or Association/Office at one time** (before you get a reply).

If your queries are general in nature, WWW resources below may help: (The AIS does not endorse these or any other organizations/businesses.)

- EduPASS: http://www.edupass.org/ – "The SmartStudent™ Guide to Studying in the U.S.A."
- I-20 Fever: http://www.i20fever.com/ – "The information hub for students"
- WorldWideStudy: http://www.worldwidestudy.net/studyintheusaata.html – General information for international students considering the U.S.A. for higher studies.
- http://www.usaeducationguides.com/ – "A resource for international students interested in studying in the USA"
- http://www.usastudyguide.com/ - "The international student guide to education and study in the U.S.A."
- International Student Travel Confederation (ISTC): http://www.istc.org/
- RedBus2US: http://www.redbus2us.com/ - "Experiences & Guides of F-1 visa, M.S., M.B.A…"

Q. I'd rather prefer talking to someone over the phone and getting my questions answered...
A: Depending on the nature of your query, you may contact the Graduate School or the International Student Office (contact information in Section 1.1). Office hours are 8:00 a.m. to 5:00 p.m. on weekdays, with a lunch break from 12 noon to 1:00 p.m. Please check the local time at Ruston, LA before you call.

2. Introduction

2.1 General Information about Tech

Louisiana Tech University, though established in 1894, is still in a budding stage in a way. The University expands into more than 150 buildings old and new, though students would not ever need to go to more than a few of them! Tech has its own gymnasium, natatorium (swimming pool), and a sports center (with indoor facilities for sports such as table tennis and volleyball), various stadiums, an athletic track, billiards and bowling place (Bulldog Kennel), tennis courts, and a golf course. Tech's basketball team and (American) football team are rising big in the national sports scenario involving other University-level teams. The females' basketball team, the Lady Techsters, and the males' (American) football team, the Tech Bulldogs, are popular in their own ways. All the sports facilities (and gymnasium), except the golf course and games at Bulldog Kennel, are free for students' use with a valid Tech ID card.

The Tech Library spans over 8 floors in "The Wyly Tower of Learning", of which 3-4 floors are essentially useful for graduate students of Engineering & Science. Tech offers three public computer laboratories with printer access, three more public-access labs essentially for the use of Computer Science majoring students; there are a few other exclusive-access student labs including one for Civil Engineering students (open for public access during the day), three exclusive-access labs for Electrical Engineering students who work on simulations, and two exclusive-access labs for Biomedical Engineering and/or Computer Science students who work on Bioinformatics.

Tech campus has a post office, a cafeteria housed in two buildings, an ATM of a local bank, a bookstore, a student health center, a dairy farm, and a University Police Station. The central area of the campus that spans around "The Lady of Mist" fountain is called the "Tech Station". The Tech Station and most other buildings that students need to access frequently are all within short distances accessible on foot from residential complexes where most Indian students stay.

Tech will soon be neighbored by a Research Park that shall house not just university research facilities but shall also invite industry names to share the space. (An information brochure about the same draws a parallel to "North Carolina's Research Triangle and California's Silicon Valley", just so that you get an idea.) Construction of various buildings is underway at this time for this purpose.

2.2 Tech Academic Profile

Louisiana Tech University is gaining a good name for its graduate programs, particularly in College of Engineering & Science (COES). Graduate programs in College of Applied and Natural Sciences (ANS) and College of Administration & Business (CAB) also have a good name among international students.

Within the College of Engineering & Science, particularly popular are its concentrations in Electrical Engineering and Biomedical Engineering. Please note that the COES offers its Masters degree as "Master of Science in Engineering" (MSE) for most majors (EE/BME/ IE/ME/CE/ChE), except a "Master of Science in Computer Science" (MS-CS) and a "Master of Science in

Microsystems Engineering" (MS-MSE). The Ph.D. degrees offered are "Doctor of Philosophy in Engineering" (all engineering and science majors except Biomedical Engineering), and "Doctor of Philosophy in Biomedical Engineering". Also offered is "Doctor of Medicine/Doctor of Philosophy in Biomedical Engineering", in conjunction with Louisiana State University Medical Center-Shreveport. The "Master of Science in Microsystems Engineering" degree is a one-year professional track program (which *can* be completed in a year). "Master of Science in Molecular Science and Nanotechnology" (MS-MSNT) is another program offered by the College of ANS and/or COES; it is a multidisciplinary program that involves various academic areas and also attracts students with majors in pharmacy, engineering, biology, and chemistry. The plusses and minuses of all majors are listed here:

Major	Plusses	• Minuses
Biomedical Engineering	• Good research facilities • Various streams within • Interdisciplinary • Essentially research-oriented	• May have to diversify coursework to include subjects from other departments (Interdisciplinary!) • Not as many options as in the past, for courses/research
Chemical Engineering	• Flexible program • Interdisciplinary research	• Not many choices for "native" courses offered by the department • Not much research in core chemical engineering
Civil Engineering	• One of the world leaders in Trenchless Technology	• Not a good choice for any conventional stream (environmental/geo/ transportation *etc.*) • Less number of Indian students in this stream.
Computer Science	• Wider knowledge in more than one stream	• Cannot study a particular stream in depth • May take longer to complete
Electrical Engineering	• Good research resources for microfabrication • One of the less-than-hundred universities to have a Micromanufacturing research facility of its own	• Not much departmental interest in anything else other than microfabrication • **No** VLSI or Telecommunications stream • Limited flexibility in Control Engineering streams; Power Engineering barely offered
Industrial Engineering	• Fee structure may make courses cheaper (equivalent to out-of-state fee waiver because of courses offered off-campus, in three quarters).	• Only two active faculty members for graduate courses! • Very little research

Microsystems Engineering	• Essentially similar to EE stream. Termed the "professional track", degree can be obtained in a year.	• No thesis or practicum option, meaning no chance to get oneself involved in research. (EE stream offers research.) • Placements still limited, though some students did get jobs in related fields.
Mechanical Engineering	• Flexible program	• Not many "native" courses • Not much research in core mechanical engineering
Molecular Science & Nanotechnology	• Great scope for challenging research • Interdisciplinary • Choice of either molecular biology or nanotechnology stream	• Interdisciplinary – mainly suitable for Biology, Pharmacy, and Chemistry streams • Essentially research-oriented field of study; **no** coursework-only option

More information about each major may be found in Chapter 4 of this resource. Note that all the Masters programs listed above, except the MS-MSNT program, offer a coursework-only option to obtain a degree, thus enabling students to complete a degree program without needing to complete any major project work and/or research. Coursework-only option generally allows students to complete their degree program in a span of 1–1.5 years; MS-MSE is exceptional in that the program does not allow any research at all – coursework-only "option" is the only possibility.

2.3 Fees at Tech

The Form I-20 actually lists the fees and expenses normally incurred at the Tech. However, the tuition and fees mentioned in the Form I-20 is a "most probable" situation and may not reflect the exact fees that you may need to pay through the academic year. The tuition and fees listed therein are **not equally divided** throughout the academic year. Also, the amount mentioned for "Books" is only an estimate and is not something that you would need to pay to the University.

Generally, a graduate student of College of Engineering and Science registers for **6 credit hours per academic quarter** in all quarters except Summer. In Summer, enrollment is optional, and registering for 3 credit hours makes a student full-time according to University regulations; registering for a minimum of 3 credit hours is mandatory in Summer *only* if you are taking up an on-campus job or assistantship during this period.

Students of BME will have to register for 7 credits in their first Fall, Winter, and Spring quarters. Students wishing to graduate faster may want to register for more than 6 credit hours per academic quarter. (Students with graduate assistantship of any kind cannot register for more than 9 credit hours per academic quarter. Also, please remember that the academic load for 9 credit hours is already very heavy and more than 6–9 credit hours may affect your grade point average.)

The tuition and fees for **6 credit hours** are:

In-state fee:	$1489.00
Out-of-state fee:	$1300.00
COES fee:	$ 37.00
COES Lab Support fee:	$ 40.00
Technology Enhancement fee:	$ 30.00
Energy Surcharge fee:	$ 54.00
International Student fee:	$ 40.00
Insurance:	$ 87.50
Total:	**$3077.50**

The tuition and fees for **7 credit hours** are:

In-state fee:	$1760.00
Out-of-state fee:	$1568.00
COES fee:	$ 37.00
COES Lab Support fee:	$ 40.00
Technology Enhancement fee:	$ 35.00
Energy Surcharge fee:	$ 63.00
International Student fee:	$ 40.00
Insurance:	$ 87.50
Total:	**$3630.50**

Students of MSE and those who wish to choose course-work-only option may register for 9 credit hours in three quarters and 6 credit hours in one quarter; this is necessary for students to complete their program in one year's time. (The full length of study is 4 quarters, or 1 year. Students can however complete the program at a slower pace, registering for lesser course load per academic term.)

The tuition and fees for **9 credit hours** are:

In-state fee:	$2047.00
Out-of-state fee:	$2106.00
COES fee:	$ 37.00
COES Lab Support fee:	$ 40.00
Technology Enhancement fee:	$ 45.00
Energy Surcharge fee:	$ 72.00
International Student fee:	$ 40.00
Insurance:	$ 87.50
Total:	**$4474.50**

Students of IE register for 6 credits per quarter too, but in three quarters, some of their courses may be offered off-campus. This reduces the fees the students pay per quarter. This applies to Fall, Winter, and Spring quarters. Thus, the **fees for them during these three quarters would be $2664.50 per quarter, _if_ one of the two courses is offered off-campus**.

Students can register for 3 or more credit hours during Summer (due to assistantship requirement or otherwise).

The tuition and fees for **3 credit hours** are:

In-state fee:	$654.00
Out-of-state fee:	$ 0.00
COES fee:	$ 37.00
COES Lab Support fee:	$ 40.00
Technology Enhancement fee:	$ 15.00
Energy Surcharge fee:	$ 27.00
International Student fee:	$ 40.00
Insurance:	$ 87.50
Total:	**$900.50**

N.B.:
1. Registering for more than 6 credits (or 7 credits, in case of BME and CS students) of coursework is not advised for students that are not in the professional track (MSE) program or course-work-only option.
2. Louisiana Tech University increases its tuition (<u>in-state</u> fee) by 3% every year, before the Fall quarter.
3. Fees are subject to change any time. The details presented above are based on the latest Expense Sheet released by the University for Fall 2011.

2.4 City of Ruston

Well, there is not really much to it! This is a small town, a little bigger than most "University towns" but is not really a city, though it is called one. There are not many "happening places" around, except for an 8-screen movie theater multiplex!

Ruston has no Indian restaurant, but it is nevertheless a home for an Italian restaurant, six Oriental (Chinese and the like) restaurants, six Mexican restaurants, (also a few American restaurants, of course) and the regular American fast food joints including McDonalds, Pizza Hut, Pizza Inn, Papa Johns Pizza, Kentucky Fried Chicken, Burger King, Taco Bell, Subway, Waffle House, Sonic, Quizznos, *etc.*

Ruston being a small place, people here are friendly and mix with the Indian crowd appreciably. There are generally events going on around the campus, you just need to know, and be interested, of course! Association of Indian Students (AIS), International Student Office (ISO), and International Student Association (ISA) also conduct events on the campus from time to time. The events conducted by the ISO and ISA generally involve the local community of Ruston and American and other international students of Tech too; some events also involve students and community in Monroe, and even Shreveport. With a little more than 200 Indian students living closely, and about 10 Indian families that meet students occasionally, you would not really feel out of place while in Ruston, though this is a small place so far away from your home in India!

Summer weather in this place is hot as in India. (Yes!) Though temperatures go only to a maximum of 36–40 °C, the heat here is comparable to 40-plus temperatures in India! Winter weather is not very extreme. However, the climate gets cold, down to zero and subzero temperatures! Wind-chill during these times (mostly middle of the nights only) might even go to as low as –15 °C, which is the temperature one actually "feels" due to the wind-chill. Rainfall occurs mainly in Spring/Summer season and moderately in Fall season. Climate in Spring and Fall is enjoyable. The cycle of seasons more or less coincides with the running of Tech's quarter system!

Ruston has more than a few banks, among which the most sought after (for Indian students) is the J.P. Morgan Chase Bank. Other banks include the Community Trust Bank, Bancorp South, Regions Bank, Iberia Bank, Sabine State Bank, and First National Bank.

Most Indian students live off-campus, in apartments shared with other Indian students. The commonly sought after apartments are Drew Apartments (more popular as "Tech Station Apartments", which happens to be an old name that is still in use), Tech Town Apartments, Tall Oaks Apartments (more popular as "Bond Street Apartments"), and University Apartments, all of which are in short distances accessible to the campus on foot. (Though the name "University Apartments" might mislead to think that these are University-owned apartments, they are just private owned apartments with an official-sounding name.) Drew Apartments are all two-bedroom apartments and four students can share each apartment. Tall Oak Apartments have one-bedroom and two-bedroom apartments, and there may be flexibility in the number of students that can share the apartments, usually ranging 3–5 per apartment. University Apartments allow only two people per one-bedroom apartments and three people per two-bedroom apartment. Tech Town Apartments has one-bedroom apartments for three people and two-bedroom apartments for four people. In any case, all Indian students flock together frequently enough in all these apartment campuses, and everyone is a part of the close-knit family of friends.

3.   List of things to be brought to Ruston

The following list has been generalized to meet the requirements of students of both genders hailing from various geographic locations of India (mainly demarcated as North and South India). Specific comments are made as and when necessary. If you are not printing this whole Guidebook, print, for your/your parents' perusal, at least this list of things to be brought to Ruston. Needless to say, our families can be good guides for us in such matters as this.

N.B.: There are "Indian stores" in and around Ruston. Prices generally do vary among various stores, depending on their vicinity to a remote location such as Ruston. Generally, at least one of your near-neighbors might be going to one of these places (if not to other larger cities around the U.S.A) as frequently as once in an academic quarter or even more, and might be courteous enough to bring any necessary commodities from there for you! But, you may still want to carry some of the stuff mentioned here, during your initial trip to the United States of America.

3.1 Kitchen & Food

In most cases, mothers would be the best judges for this section, fortunate for us.

- **Pressure cooker:** Almost all students tend to buy an electric rice cooker in the U.S.A. soon after they land; it is not very expensive, and it proves to be a good and reasonable investment. However, if you do want a pressure cooker, you would have to buy and bring it from India. If you have decided about your roommates in advance, plan to get **ONLY ONE OR TWO** (two being the maximum) pressure cookers for the apartment. A pressure pan/cooker which can accommodate an idly stand might be an ideal choice for students who might want to make idlies. **Do not forget to get spare gaskets and/or safety valves or other wearable/replaceable parts that suit the pressure cooker you may bring.**

- **Steel utensils:** You can buy a good set of steel/nonstick utensils (that can be used for cooking) in the U.S.A. for a reasonable price. If you prefer to get some utensils from India anyway, get **at least some vessels** of various sizes – to store and to cook food, and (meals) plates and tumblers. You may also get at least, but not more than, a few spoons and forks. **If space/weight is a constraint, reduce the number of utensils you carry** – you may buy them after settling in Ruston. If you have decided about your roommates in advance, plan to share your loads.

- You might need **deep fry pans** or **flat pans** for your use in the kitchen. (Nonstick cookware is the best choice!) Remember that all your cookware should be useful to cook for at least four persons at a time, without mentioning any "guests". You may buy one after you land here, if you cannot accommodate one in your baggage.

- **Miscellaneous:** Grater, sieve (for atta/flour), tea/coffee filter (personal choice), and knives (good ones can be bought here as a set, esp. if you also use knives for non-vegetarian food) can be considered as optional stuff you might want to get. A **peeler** can prove to be useful anyway. Make sure you do not carry any knives or peeler in your cabin baggage!

- **Raw materials for cooking (ask your mother or whoever might cook):**
  (**Please note:** When it is said "as per preference", it means that the items enlisted are unavailable except in Indian stores; see the note above.)

    - **Do not** bring **rice**, not even in small quantities. Rice is widely available in Ruston. Indian stores also carry Indian varieties of rice such as *Sona Masoori* or Basmati.
    - *Sambar/Rasam* **powder** may be brought as per preference, quantities ~1 kg each.
    - **Tamarind** (1-2 kg, preferably seedless) and/or **tamarind paste** might be necessary.
    - *Haldi/***Turmeric**, *hing/***asafoetida**, *etc.* might be necessary for at least some sections of students.
    - **Mustard seeds, cumin seeds (***jeera***)**, *etc.*, would be among the necessary commodities for some of the students. Around 0.5-1 kg of each should meet a moderate requirement.
    - **Dried** **curry leaves** might be a good choice for some; they do not take up much space or weight. If you are bringing this, make sure the leaves are thoroughly dry before you pack them, as even little wetness can attract fungus. (Coriander can be bought locally.)
    - Some students may also want to get coriander and cumin powder(s) (available as a mixture of both too), quantities ~1 kg, as per preference.
    - Get all the **pickles, chutneys, or edible powders** as you can. (There is always a risk of they getting left out at the port of entry or somewhere in the transit because of restrictions on the type of luggage you bring in, but that is really very rare – you <u>do not</u> need to declare any food items such as these.)
    - Noodles are available in abundance in all local grocery stores. However, students following vegetarian diet might prefer to carry a few packs of masala ("Tastemaker" as referred to by Maggi®) though, as vegetable noodles are not common here, but the masala can be added to any locally bought noodles. (Maggi®, Top Ramen®, or other Indian brands of noodles can be bought from Indian stores.)
    - **Most other stuff that might come to your mind is not mentioned here because they are all available in Ruston or nearby.**

- **Sweets & Savories:** Remember that you cannot really store such fast food for long, not because of the weather conditions but because of the temptation to eat them off. Of course, students might still want to get some, and more commonly parents might want to send some! Keep them coming, you would find many thankful souls too. But save your luggage space for something more lasting, say, pickles. And, also be informed that **sweets or any foodstuff** <u>**may be**</u> **disallowed** anywhere on the transit when your bags are scrutinized.

3.2 Clothing & Attire

Most of the content below will be useful for students of both sexes.

General Wear:

- Get <u>more</u> **casual** dresses, like T-shirts, jeans, cargos, khakis, *etc.* (Regular fit is the best for guys. Avoid tight-fits/bell-bottoms if you do not want to stand out from others!) Girls also wear *chudidar*-s/*salwar*-s frequently enough for daily use. T-shirts and jeans (tight-fits are most common) may be the choice of a few girls, and of course, those are acceptable anyway. 10–15 t-shirts/casual shirts, and 5–8 trousers/jeans are a minimum suggested lot. Students tend to buy more apparel locally over time, for reasonable prices at clearance sales and/or discounted sales.
- **Formals** are <u>rarely</u> worn! You need **not** get more than a few pairs. A suggested <u>maximum</u> is 5 pairs.
- Get 1-2 **ties**; a **blazer/suit is optional**. (Either a blazer or a suit is recommended.) If you are getting a blazer, get a matching tie and suitable formal trousers that can go with the blazer. If you are getting a suit, get a matching tie. Take care that your formal shoes would look fine with the rest of the formal attire. **A business-style black/blue suit is highly recommended, only if you are considering bringing one.**

Seasonal Wear:

- A leather jacket is **<u>not</u>** suggested for protection from weather. Get a stuffed jacket, but without fur on the outside (rather, the "inner" outside)! (These might be bought from Nepalese/Tibetan sellers by the roadside in bigger cities, or even in showrooms, of course!) The bottom line is **"get something to serve for both cold and rain"** (…unlike a not-very-expensive leather jacket or a fur-covered jacket. Gents do not wear fur coats anyway, particularly in these parts of the country! Fur tends to get damp in winter/rainy climate.) Wear the jacket in the flight – it not only increases your luggage carrying space but also might be necessary for somewhat low temperatures you might feel inside the flight!

- (Specialized) **Thermal wear** is **NOT** necessary. Get a **sweater** or two. Get a **monkey cap** majority of the face – it is definitely a requirement on some cold windy winter nights in Ruston. Get a pair of gloves too; you may want them to match with your jacket (**NOT** woolen). All these can also be bought in Ruston locally.

- **Windcheaters** will **<u>not</u>** be necessary, especially because rain/wind is generally cold and these can be substituted with the jacket you would bring.

Miscellany:

- **Get <u>at least</u> 1-2 pairs of traditional (Indian) dress**. Remember that there would be more than a few occasions a year where you might have to represent your culture. And you might prefer not to repeat the same attire on all such occasions. Girls can bring sarees – silk, designer-wear, or something more suitable.

- Most students do their laundry once in a fortnight, or even less frequently! Apply this estimate to **all the garments** you bring, including miscellaneous items like socks, kerchiefs, undergarments, *etc.*

- Get a pair of formal leather **shoes** (black, preferably, but choose the color according to the shades of formals and/or blazer/suit you would get) and/or a **semi-formal pair of shoes** that can serve dual purpose. Apart from that, get a pair of **sneakers/sport shoes** for regular use. Sprint shoes, canvas shoes, or other special purpose shoes may be bought here as per personal preference. Offering a comparison, ormal shoes cost about $80-100 and sneakers/sport shoes cost about $20 (non-branded) or $50-70 (branded) and can be bought locally.

- Get **belts** that might be necessary for all your pants/trousers - broad ones for jeans, narrow ones for formals, black, brown, *etc.* as per preference. Offering a comparison, good leather belts in U.S. cost about $10 each.

3.3 Assorted

Hobbies:

Do not neglect your hobbies; you would regret later when you feel bored, and that is going to happen too often, particularly when the school is not in session!

- Get any (portable, literally as in "able to be carried") **sports/games-related items** like chess board and coins (Chess boards and coins may also be bought in the U.S.), swim-shorts/swimsuits and swimming goggles (absolutely essential if you want to swim – chlorine in the pool is in higher content than in India) and swimming cap, table-tennis/tennis racquets, *etc.* Remember that there's also the LaTech Cricket Club (LCC) on the campus, a sister-organization for Association of Indian Students.

- For **other hobbies** like painting or music, bring stuff that you cannot get here easily or inexpensively, which includes the likes of paintbrush set, paints, mixing template, charts (yes, if you can roll them up in a carrying case!), *etc.* (You can buy pencils and erasers here, of course!) or flute (a set of flutes, rather – which flutist would carry only one flute?), a small violin, *etc.* Collectors of stamps, coins, currency notes and the likes may want to display some Indian stuff to foreign friends you might soon make here. You may also put the collection to display on more than one occasion a year, when there are international events on the campus.

- If you have any certificates pertaining to your hobbies, at least get a few prominent ones; sometimes, they might fetch you some kind of funding in remote places such as the School of Art.

Stationery:

- Get the **textbooks** listed in the profile for your major. (See Chapter 4.) **If there is no profile or if there are no textbooks otherwise mentioned, that might mean that you would not find any textbooks that can be bought from India.** E-mail AIS and ask, to be sure.

- The **punching** used for papers (for filing) is of **3 holes** here unlike 2-hole punching in India. Thus, **avoid getting files and punches**, and you can buy the corresponding things here! Of course, you may get zipper folders in which you do not necessarily punch and file your documents!

- **Stapler, staples, glue stick, adhesive tape**, *etc.* can be bought locally for a comparable price.

- **Notebooks** and **plain/ruled paper** can be bought locally for reasonable prices.

Toilettery:

- Get a **mug** for use in the bathroom. You may not need a bucket anyway, and if need be, you may buy a pail here.

- Get **soapboxes**. Soapboxes are not very uncommon in the stores here, but the soapboxes in the U.S.A. do not generally have drain outlets for remnant water after use!

- **Tongue cleaners** may be classified among things that are **not** available in the U.S.A. Get about a half a dozen to dozen tongue cleaners, depending on the type/material of tongue cleaners you prefer to use. Do not carry metal tongue cleaners in the cabin baggage – if it is sharp, it can be considered as a "security threat"! (Yes, there were such cases in the past!)

- **Talcum powders and hair oils** are among the rare commodities here, unfortunate for some! Get your choicest ones, even if it is the seemingly "most common" Parachute Coconut Oil or Denim Talc.

- Girls should already know what they need in their makeup kits. If you are in for wild shades of nail polish, lipstick, or eyeshades, everything is welcome here!

- One can buy one's bath soaps, shampoos/conditioners, toothpastes, toothbrushes, shaving foam (or a shaving gel/cream), razor/cartridges, deodorants/perfumes, *etc.* locally for reasonable prices. If you have been loyal to particular brands, you might want to carry a few numbers of each of those for initial use. You may **not** ever need a detergent cake while you are here, though you might want to carry one. Do not carry detergent powder; liquid detergent is cheaper here!

Miscellany:

- Get **at least 2-3 pairs** of **prescription spectacles** if you use them; as a comparison, prescription glasses cost about $100 per pair (or more) in the U.S.A!

- Get any portable (literally taken) **relics/memoirs** that might represent your culture, which can be useful for display on relevant occasions. As mentioned above, stamps and/or currency can be a part of these too. The items can be specific to a remote place in India or to a remote culture, or even common culture or place, of course! Almost anything is welcome, but **do plan to get something at all**. Statuettes of gods and goddesses, photographs of interesting places to visit, handicrafts, *etc.* may also be brought for this purpose.

- Get **general medication** that can serve as a makeshift first-aid kit. The best guide would be a medical shop attendant or a general physician (or a family doctor, of course). A sample list of medication that you might find useful is presented here: Febrex Plus (fever, and related ailments such as cough, cold, and body-/head-aches), Avil (general allergies), Eldopar (to prevent loose motions), Zandu Balm/Amrutanjan/Mentho Plus (body-/head-aches), Digene/Eno (digestion/gastric trouble). If you need to carry specific medication for any particular ailment, check with your doctor to find an equivalent that is available here locally, and still bring at least a couple of months' dose anyway. It is **highly recommended** that you carry a doctor prescription for <u>all</u> medicines you may carry. Please note that this is only a suggested list and that the AIS does not endorse the individual's use of these or any other medicines; please consult your doctor for necessary advice.

- **Do not** bring any **electrical appliances** because the appliances here run with a different electric socket/plug and at 110 V @ 60 Hz.

- You may get as many **audio/video CDs** (of Indian movies or music) for your use. This includes **mp3 CDs** that you might have burnt on blank CDs. Copyrighted or not, CDs are not generally questioned about (by the U.S. Customs). You need not declare them unasked, but be informed that you may have to forego the collection if questioned. (You may try to convince them that is just a collection of all your "legally owned" music/software, but you may still have to forego them even if your argument is true/valid.)

- Get a **headset** (headphone, preferably stereo, with microphone) for voice chat with parents and friends back home or just to listen to songs (even if you do not plan to voice chat, get one with a microphone). Offering a comparison, a similar appliance may be bought here for prices $20 and up.
- Get **wallets** that have enough pockets to hold credit cards that you have to carry in future. Girls may get appropriate purses/bags of their choice instead.

- Get a **college bag** to suit your daily needs. Remember that the bag might have to accommodate bulky books that you may carry from/to library or even large quantities of printed out papers sometimes! Offering a comparison, college bags cost $20 or more

here. A wiser idea might be to get a **laptop-friendly backpack** instead, so that it can serve the purpose of a college bag, and it can help you carry a laptop when you might eventually buy one. Make sure that the bag can fit a 15.4" laptop (though you might prefer a 14.1" laptop anyway).

- Get your **photos**; you might want to cherish the memories of home and family (and get nostalgic, sometimes). **Passport-sized photos** will not be needed until the time you are about to graduate and thus carrying them may not be necessary.

- You may want to get trivial things like **extra buttons** for your clothes, **needles and threads** (black/gray, white, brown, *etc.* – "universal" colors are enough), **safety pins**, **nail-cutters**, **scissors**, **mirror** (a classic hanging mirror - a small one, about 8" x 4" should do), *etc.* These can be bought locally too for reasonable prices.

- This is not something you would bring, but this is something I suggest you to <u>**leave there**</u>! - A few **blank white papers signed** at the right-bottom side for any need that might arise in your absence – requirements of bank loans, *etc.* is an example.

- Whether you plan to transfer or not, get extra sets of **transcripts, letters of recommendation**, *etc.* that you might need if you need to apply to a different school.

- Please bring all your **original certificates** of your Bachelors degree (and above). If you have a consolidated marks memorandum, you may not need to bring individual marks memoranda. Similarly, if you have your original degree certificate, you need not bring your provisional degree certificate. You would not really need the certificates prior to your Bachelors degree, but you may want to carry them anyway just so that you do not forget where you put them in India.

3.4 Money

- A **total of about $10,000** shall cover all major expenses – fees (all majors), living expenses, insurance, personal expenses, *etc.* in the first 6-7 months, during which time one can look for a legal source of earning (on-campus jobs and assistantships).
- To pay your **fees**, a DD for <u>at least $3100</u> should be taken in favor of "Louisiana Tech University". (This amount will suffice if you would register for six credit hours, as is the minimum course load for most students. Refer to Section 2.3 and bring a DD for a higher value if you are planning to register for more credit hours.) If you plan to pay your fees by other means such as an international credit card, see below for more details. <u>**Any**</u> excess amount on the draft that is not used to pay the fees is refunded within 15 days after fee payment. (Banks in India tend to issue drafts for larger amounts if you seek education loans; however, you would receive a full refund of the excess amount.)

- Get **travelers' checks** (travellers' cheques, to sound more "Indian", or TCs) totaling to $1000. A suggested breakdown is as shown below.

$$\$500 \times 1 = \$500$$
$$\$100 \times 4 = \$400$$
$$\$50 \times 1 = \$50$$
$$\$20 \times 1 = \$20$$
$$\$10 \times 3 = \$30$$

- Get **currency** of $500; you would not need more than this amount initially, before you open a bank account. If you will, you may carry some more money in travelers' checks, which is as good as cash most of the time. A suggested breakdown is as shown below.

$$\$100 \times 4 = \$800$$
$$\$20 \times 3 = \$60$$
$$\$10 \times 3 = \$30$$
$$\$5 \times 1 = \$5$$
$$\$1 \times 5 = \$5$$

- Get the **remaining amount as TCs or as a self draft (a DD in your FULL name spelt as in your passport)**. Getting **TCs might be advantageous** in that they can be turned into cash the same day they are deposited, unlike a DD which takes one to three weeks from the date of deposit to be available in your account. In case of TCs, you may get them in **denominations of $1000 and/or $500.**

- There, apparently, is no practical limit of any kind on the amount that can be carried in various forms, except as currency. However, if you are carrying $10,000 or more in all currency and other "monetary instruments", you are required to "declare" it when you land and you may need a letter of approval from the Reserve Bank of India. (Ask your bank for more details.) **Do not forget to ask the flight attendants and/or the Department of Homeland Security about it, if you are carrying amounts larger than $10,000.** Remember that there could be similar requirements set forth by the Reserve Bank of India, in order to allow you to carry the same – ask your bank about it well in advance.

- International **credit cards** might be carried as a financial backup, but might not be useful for all your purchases and payments. American Express card **cannot** be used to pay fees at LaTech, though it can be used for other purchases and expenditure. Please note that a Visa Electron card (such as '*Viswa Yatra*' from State Bank of India) is **not** regularly usable here, and there is a pay-per-use transaction fee for the same. Some may still see the card as a safer way of carrying money; you may use it only once – to transfer all the money into your local bank account that you open here.

- A MasterCard/Visa Card issued by any bank in India (Examples include HDFC ForexPlus Card, SBI Vishwa Yatra Foreign Travel Card, ICICI Bank Travel Card, IDBI World Currency Card, and Axis Travel Currency Card.) may be used for purchases or to withdraw money from any ATM ($2 per withdrawl charged by the bank in India, apart from any other fees

levied by the local bank in the U.S.A). **Some of these cards may charge a transaction fee on every purchase. Enquire with the bank about the usage policies and restrictions.** A Visa Electron card is generally <u>not</u> usable in the U.S.A.

3.5 Insurance

Insurance is mandatory for all international students at Tech. Bollinger Insurance and Monumental Life Insurance Company together offer this to Louisiana Tech University. More information about the Master Policy can be seen here: http://www.bollingerinsurance.com/ltu/. The insurance premium amount is set at $87.50 per quarter. **This Master Policy shall be issued to every individual, and no individual policy can be chosen.**

As a sidebar, most of the students who seek bank loans may have to take life/medical insurance in India, as a security to the loaned amount. This insurance might not be very useful while in the U.S.A. (It is generally "life" insurance and not health/medical insurance! Medical insurance or health insurance covers health ailments and hospitalization, but life insurance **only** covers death or dismemberment of organs.)

The Insurance Master Policy brochure reads thus: "The Company shall pay all covered medical expenses up to the limits of the Policy that are not paid or payable by other insurance." **Please seek the advice of your insurance agent as to what this might mean, and if an insurance policy from India shall still benefit you.**

Many big insurance companies in India offer plans that might suit your needs. Since the premium, the coverage plan, and the reimbursement period are very similar in India and U.S.A., some students may want to get covered from India paying the premium in rupees. (Extension of the plan at a later date requires a signed letter and any renewal form to be sent to them, and it is advised that students leave with their families a few blank papers duly signed if they want to pursue this option.) Please remember that the International Student Office (ISO) needs to approve an exemption to pay for insurance as a part of your fees at Tech. Thus it may be wise to e-mail the ISO beforehand and prepare yourself accordingly, if you plan to buy your medical insurance from India. **If your international insurance exemption is not approved, you may have to still pay your insurance premium as a part of the fees at Tech.**

4. COES Academic Profiles

Most Indian students to Tech come for all majors offered by College of Engineering and Science (COES). Thus, only those majors have been profiled here; also Molecular Science and Nanotechnology (MSNT) major offered by the College of Applied and Natural Sciences is listed, as this is also one of the choices for engineering students coming from India. More profiles, such as those offered by College of Administration and Business (CAB) may be added in future versions of the Guidebook.

Please note the following **general comments** before you proceed to read the academic profile for your major:

- At Tech, there is no particular specialization that one can opt for, but one's field of research can be considered one's concentration. This applies to all majors listed in this chapter.
- The textbooks for core courses are listed at the top of each list, with their titles in ***bold-italic*** style, while textbooks for other commonly chosen courses are listed in *italic* style. It is **strongly advised** that you get all the textbooks listed for core courses (of course, depending on availability), and it is still __recommended__ that you get the other textbooks that are listed. Please be informed that each textbook costs about $100 in the U.S.A, which is a lot many times more than the prices in India. Photocopying of textbooks is generally treated as a breach of copyright and is discouraged by most faculty members. And, you might actually take those courses anyway. Of course, if you want to go for a particular stream (within a major) for sure, you may ignore textbooks listed for other streams.
- If textbooks are not listed, it could most probably mean that you will not need any textbook for the course, (The faculty member may provide you reading material.) or that the prescribed textbook is not available in Indian market. Sometimes, it could also mean that the textbook that would be followed by a faculty member is not finalized, or that the faculty member is not finalized, and thus the "prospective" faculty member's choice of textbook cannot be guessed!
- A research concentration listed indicates that at least one assistant/associate professor is working in that field, and **not necessarily that there is a great lot of research going on in that field.** This applies to all majors listed in this chapter.
- At Tech, one **may** get funded _after_ 6-9 months, **if** one starts working for one of some faculty members without anticipating or asking for funds, but only if one works **as if one is funded!** Any/All specific comments made exclusively in each profile are made with respect to this "general" wait time of 6-9 months, and with the above assumption that one starts working. Please note that the **6-9 month wait period "starts" when you start working for a faculty member** and not necessarily when you start your academic program at Tech!
- At Tech, the job scenario was quite appreciable before the economic slowdown, before some sections of people raised their voice against outsourcing to India, before the U.S. Presidential election, *etc.* It was just okay during the economic slowdown too, for Tech. Several reasons, also political scenarios in India and U.S.A, have been affecting the job market of late, but it is generally picking up at this time. Still, of course, the scenario after two years, about the time you graduate, would be unpredictable. Who knows

what can happen before then! Some specific comments are however made as appropriate to a major.

- In most universities in the U.S, faculty member teaching a course generally decides the textbooks, examination pattern, and everything else pertaining to the course offering at that particular time. Thus, the listed textbook(s) or comments about curriculum, if any, may not be entirely correct.

- Knowledge of common tools like **MS-Office** suite, and **Microsoft Windows** Operating System, is assumed for everyone. **Be prepared to use MS-Office suite – particularly Word, Excel, and PowerPoint – extensively!** And, it is recommended that you **learn various features of each software application within MS-Office** and practice to use these applications, and to type fast, if you think you need to improve. (<u>You do not need formal training on typing!</u>) Regardless of your major, you would need to use these applications. Any other specific software knowledge will be listed in the profile for your major, as may be appropriate.

Profiles are listed in alphabetical order.

4.1 Biomedical Engineering

Core Courses:
1. System Physiology for Biomedical Engineers (BIEN 500) – Offered in Fall.
2. Bioinstrumentation (BIEN 510) – Offered in Winter.
3. Physiological Modeling - I (BIEN 501 - Prerequisite: BIEN 500) – Offered in Spring.
4. Biometrics (STAT 508) - For Ph.D. students **only**. (Not strictly followed; sometimes, this course may be substituted by any other graduate course in mathematics or statistics.)

Faculty:
4 assistant professors, 2 associate professors, 4 professors (Only one of the professors has been regularly teaching.) and a Research Associate (who shall not teach any course).

Research Concentration:
Bionanotechnology, biomedical optics/imaging, cellular neuroscience, neural signals and systems, human-computer interface, protein engineering, tissue engineering, biosensors, physiology and physiological modeling, medical ultrasonics, biological micro- and nano-fluidics, biochemistry, biosensors, biocomputing, bioinformatics, biomechanics, *etc.*

Funding Scenario:
The funding scenario is generally good for the department. However, at this time, the funding position is not very optimistic.

Job Scenario:
Of late, internship positions are opening up slowly. Permanent job positions might be picking up soon, if not already. However, the job market is good for only certain streams at any given time in the recent past.

Special Notes:
- The Biomedical Engineering program at Tech is recognized as an appreciable program by a few top schools in the discipline.
- The current President of the University was the first program chair of the biomedical engineering program here, and that is probably one of the reasons that the department was more in focus in the recent past.
- The University boasts of a Center for Biomedical Engineering and Rehabilitation Science, or the CBERS) or simply the Biomedical Engineering Center (BEC), an exclusive research facility recently built for all bio-related research at the university.

Software Requirements:
As a part of the coursework for BIEN 510, students would be taught **MATLAB**, and might also be using **LabView** and **PSpice** to some extent. Knowledge of programming languages like BASIC, C, and Visual BASIC may be useful but **not** absolutely necessary. **MathCAD** is also recommended to make things easier, and one may be interested in learning that (it does not take much time to pick up, though!). Brushing up the basics in any of this software would help.

Textbooks:
Textbook of Medical Physiology - A.C. Guyton and Hall (12th edition)
Transport Phenomena in Biological Systems - George A. Truskey, Fan Yuan, David F. Katz
Medical Instrumentation: Application and Design - John G. Webster (4th Edition)
Principles of Neural Science - Eric R. Kandel, James H. Schwartz and Thomas M. Jessell (4th edition)
From Molecules to Networks: An Introduction to Cellular and Molecular Neuroscience - John H. Byrne and James L. Roberts (2nd edition)
Neuroscience: Exploring the brain - Mark F. Bear, Barry W. Connors, Michael A. Paradiso
Any textbook for Op-amps, Digital Signal Processing, *etc.* (suggested as a supplement; <u>not</u> *required*)

Related Links:
<http://www.latech.edu/coes/biomedical-engineering/> – Department website (see all the pages in here)
<http://www.latech.edu/coes/cbers/biomedical-engineering-research.shtml> - All research related to Biomedical Engineering
<http://www.latech.edu/registrar/bulletin/Catalog_2012_Web_Edition_2.pdf> - Course Descriptions (pp. 167–168)
<http://www.latech.edu/coes/cbers/> – CBERS website

4.2 Chemical Engineering

Core Courses:
1. Transport Phenomena (CMEN 513)
2. Advanced Thermodynamics (CMEN 522)
3. Chemical Reaction Engineering (CMEN 402) (May possibly be substituted with another course)

Faculty:
2 assistant professors, 1 associate professor, 1 visiting professor, and 1 lecturer

Research Concentration:
Chemical microsystems, microreactors, molecular modeling and simulations, electrochemical engineering, micro-/nano-fabrication, micro-/nano-fluidics and more research that involves polymers and research related to biomedical engineering (mainly involving proteins, enzymes, and biosensors).

Funding Scenario:
The funding scenario is generally good for the department, as the inflow is lesser compared to some other departments.

Job Scenario:
Certain streams have a bright picture; however, due to increased security measures, jobs for foreign nationals are limited in both quality and quantity.

Special Notes:
- There are not many subjects offered within the Department, but since most research is related to biomedical engineering and/or microfabrication, students find research projects to work on, and assistantship eventually. Students tend to take courses according to their research projects and so "limited choice" for native courses is not a situation that leaves the students in a complete dilemma.

Software Requirements:
No particular recommendation.

Textbooks:
Introduction to Chemical Engineering Thermodynamics - Joe M. Smith, Hendrick C. Van Ness, Michael M. Abbott
Analysis of Transport Phenomena - William Deen (prescribed)
Transport Phenomena - Bird, Stewart and Lightfoot
Elements of Chemical Reaction Engineering - H. Scott Fogler

No other textbooks can be listed here, as most students choose courses depending on their research projects, which could mean that they take most courses which might not have textbooks!

Related Links:
<http://www.latech.edu/coes/chemical-engineering/> – Department website (see all the pages in here)
<http://www.latech.edu/registrar/bulletin/Catalog_2012_Web_Edition_2.pdf> - Course Descriptions (p. 169)
<http://research.latech.edu/directory/places/26> – Research in the Department (see all the pages in here)

4.3 Computer Science

Core Courses:
1. Advanced Analysis of Algorithms and Complexity (CSC 520)
2. Advanced Computer Architectures (CSC 521)
3. Advanced Topics in Software Engineering (CSC 532)

Prerequisite Courses:
1. Discrete Mathematics, Data Structures and Algorithms (CSC 425)
2. Programming Language Paradigms and Software Development (CSC 437)
3. Architecture and Operating Systems; Parallel Computing (CSC 445)

Course Structure:
Apart from the core courses, one needs to take two (or three, in case of practicum/non-thesis option) two-course sequences/concentrations (from database systems, computer graphics, artificial intelligence, programming languages, and computer networks, and/or computer architecture concentration), and one other elective (two electives in case of practicum/non-thesis option).

The prerequisites need to be waived (a waiver examination is given before the particular course offering) or taken any time during the coursework.

Faculty:
4 assistant professors and 3 associate professors.

Research Concentration:
Computer graphics, networking, robotics, distributed computing, data mining/bioinformatics, *etc.*

Funding Scenario:
With options like Center for Entrepreneurship and Information Technology (CEnIT), the funding opportunities are considered high enough, but somehow, there are always unfunded students in the department. General wait period is 9-12 months from the date of admission.

Job Scenario:
LaTech CS graduates could secure jobs even during the economic slowdown, but things seem to have slowed down a bit later. The market is picking up a lot again now, but most requirements of job market use software applications not taught/used much at Tech!

Special Notes:
*   Research in the department is just gaining more importance now, and the variety of research is increasing now.
*   If one wants to concentrate **only** on one particular field, LaTech is **NOT** a very good choice, as one would require studying more than concentration in detail.

Software Requirements:
All students are expected to know **C** and **C++**. There is a course that teaches C++, but would be offered only in Summer quarter, which means students coming in Fall might want to brush up their basics! Based on the course concentrations chosen, one may need to know **Java**, **Visual**

Basic, or **PHP** and **SQL**. However, there is **NO** course that teaches **Java**, **PHP**, or **SQL**; **Visual Basic** (which may not be very much a requirement) is taught only infrequently. Knowledge of common tools like **MS-Office** suite is assumed.

Textbooks:
C++: How To Program - Dietel & Dietel
Operating Systems Concepts - Silberschatz & Galvin
Computer Networks - A Systems Approach - Larry Peterson
Introduction to Data Structures - Bhagat Singh & Thomas Naps
Java 2: The Complete Reference - Herbert Schildt
Fundamentals of Database Systems - Elmasri & Navathe
Database Systems: The Complete Book - Hector Garcia-Molina, Jeffrey D. Ullman, Jennifer D. Widom
Computer Architecture - William Stallings
Compilers - Aho, Ulman & Sethi
Programming Languages - Ravi Sethi
Parallel & Sequential Algorithms - Kenneth A. Berman & Jerome L. Paul
Advance Computer Architecture: A Design Space Approach - Dezso Sima, Terence Fountain, Peter Kacsuk
Data Mining Concepts and Techniques – Jiwei Han & Micheline Kamber
Artificial Intelligence: A Modern Approach – Stuart Russell & Peter Norvig

Related Links:
<http://www.coes.latech.edu/cs/> – Department website (see all the pages in here)
<http://www.latech.edu/registrar/courses/2004-2005/courses_c.pdf> – Course Descriptions
<http://research.latech.edu/directory/places/29> – Research in the Department (see all pages in here)
<http://cenit.latech.edu/> – CEnIT website

4.4 Electrical Engineering

Core Courses:
There is no particular set of core courses that one needs to take. However, if one chooses Micromanufacturing as the area of concentration (which is the most common concentration for EE at LaTech), the requirements would be as follows:

1. Microfabrication Principles (ELEN 437)
2. Microelectronic Applications and Device Fabrication (ELEN 438)
3. Advanced Topics in Microelectronics (ELEN 535)
4. Advanced Microfabrication with Computer Aided-Design (ELEN 537)
5. Advanced Microelectronics Devices with Computer Aided-Design (ELEN 538)

Course Structure:
As there are no core courses, it is generally required that a student (of any concentration) must take at least 4 courses offered by the department (See the links below and find courses with numbers starting with ELEN). The following lists can be considered as choices for students of the

specified concentration. **Please be reminded that <u>only a very few</u> of these courses have been offered lately.**

Communication Systems or Signal Processing: ELEN 411, ELEN 412, ELEN 461, ELEN 462, ELEN 463, ELEN 512, ELEN 513, ELEN 561, ELEN 565.
Control Systems: ELEN 471, ELEN 472, ELEN 561, ELEN 565, ELEN 572, ELEN 573.
Power Engineering: ELEN 481, ELEN 482, ELEN 582, ELEN 583, ELEN 584, ELEN 588.

Faculty:
5 assistant professors and 2 professors (counting only those who offer graduate courses regularly).

Research Concentration:
Micromanufacturing (at the University's research facility Institute for Micromanufacturing), communication engineering, signal processing, control systems, *etc.*

Funding Scenario:
Limited scope for power engineering, control systems, and communication and signal processing. Micromanufacturing has better scope than other streams, due to its interdisciplinary nature.

Job Scenario:
Not many students who graduated lately have looked for jobs in their field; most of the people went for IT-related jobs without waiting or looking much. The job market is promising though, and things seem to be getting better with microfabrication. Streams other than microfabrication have always been steadily recruiting people though the numbers (of students who go for other streams at Tech) are not too high.

Special Notes:
- The University is popular for its EE program because of the famous Institute for Micromanufacturing (IfM). Though the school also offers a Masters program in Microsystems Engineering (MSE), the institute is generally populated by more EE students (apart from BME, ChE, ME, *etc.*).
- The field of MEMS (Micro Electro-Mechanical Systems) is a more general concentration of research for students; fruitful research is going on to reduce the size of the devices to nanoscale (NEMS).
- Only a few universities in the U.S.A. have a good research facility for microfabrication, and Louisiana Tech is one of them.
- The IfM works in collaboration with the Center for Advanced Microstructures & Devices (CAMD) of LSU, Baton Rouge (a part of the University of Louisiana System), thus complementing at least some of the facilities that Tech lacks.
- The proposed Research Park

Software Requirements:
MATLAB is essential through a part of the course work. Learning **MATLAB**, **MathCAD**, *etc.* could thus be of help. Knowledge of common tools like **MS-Office** suite is assumed, but make sure you actually *learn* various options available in MS-Word, MS-Excel, and MS-PowerPoint.

Textbooks:
Fundamentals of Microfabrication - Marc Madou
Digital Signal Processing - Alan V. Oppenheim & Ronald W. Schafer
Digital Signal Processing - Sanjay K. Mitra (3rd edition)
Silicon VLSI Technology: Fundamentals, Practice and Modeling - James D. Plummer, Michael D. Deal, Peter B. Griffin
Introduction to Microelectronic Fabrication: Volume V (Modular Series on Solid State Devices) - Richard C. Jaeger (2nd edition) (Gerold W. Neudeck, Robert F. Pierret - Series Editors)
Solid State Electronic Devices - Ben Streetman & Sanjay Banerjee
Digital Control Systems - Benjamin C. Kuo
Discrete-Time Control Systems - Katsuhiko Ogata (2nd edition)
Modern Digital and Analog Communication Systems - B.P. Lathi (3rd edition)
Nanotechnology - Gregory Timp (Editor)
VLSI Technology - S. M. Sze
Microelectronic Devices - Edward S. Yang
ULSI Technology - S.Y. Chang & S. M. Sze
Introduction to Solid State Physics - Charles Kittel (8th edition)
Physics of Semiconductor Devices - S.M. Sze

Related Links:
<http://www.coes.latech.edu/ee/> – Department website (see all the pages in here)
<http://www.latech.edu/registrar/courses/2004-2005/courses_c.pdf> – Course Descriptions
<http://research.latech.edu/directory/places/28> – Research in the Department (see all pages in here)
<http://www.ifm.latech.edu/> – Institute for Micromanufacturing (IfM)

4.5 Industrial Engineering

Core Courses:
This list will be updated later. (Since there is not much choice of courses anyway, check out all the courses listed under Industrial Engineering in the link for "Course Descriptions". Not all courses listed shall be offered though.)

Course Structure:
Among the commonly offered courses are: INEN 502, INEN 507, INEN 508, INEN 512, INEN 513, INEN 514, INEN 516, INEN 557 (various topics). Offered in Fall 2005 are: Location analysis (INEN 557), Operations Research (INEN 502), Cumulative Trauma Disorder (INEN 557).

Faculty:
1 assistant professor, 1 associate professor, and 1 professor. (That is all, but all of these teach courses regularly.)

Research Concentration:
Human factors and ergonomics, micromanufacturing, operations research, production planning, machine vision, robotics, location analysis – all these are, actually, a thing of past! Currently, with just three faculty members, there is not much emphasis on research, and there are **hardly any ongoing projects**.

Funding Scenario:
Funding is limited, since research is limited, but students have to pay lesser fees, thanks to the Indian professor who offers one course per quarter off-campus, thereby reducing the fees (See Section 2.3.) in the first three quarters, and Summer has lesser fees anyway.

Job Scenario:
Not many graduates in the last few years. With the information we have, at least some of them are well-placed.

Special Notes:
- Most courses are offered by the Professor in the Department.
- Since there are just three faculty members, the choice for courses is less. Students generally have a fixed set of courses. Thus, the list of textbooks below is necessary and adequate for most cases. (Please be informed that not all textbooks can be bought in India.)
- Non-thesis option is quite common since there is not much ongoing research. (In the recent past, though, the Department also had Ph.D. students!)
- Four courses offered by the Department are among the core curriculum for **M.S. in "Engineering (and Technology) Management"** program.

Software Requirements:
No specific requirement.

Textbooks:
Engineering Management - Robert Shannon
Introduction to Operations Research - Frederick .S. Hiller, Gerald J. Lieberman
Simulation with Arena - David W. Kelton, Randall P. Sadowski, Deborah A. Sadowski
Probability and Statistics for Engineers & Scientists - Ronald E. Walpole, Raymond H. Myers, Sharon L. Myers, Keying Ye
Logistics of Facility Location and Allocation - Dileep R. Sule
Ergonomics in Manufacturing: Raising Productivity through Workplace Improvement - G. Salvendy & W. Karwowski
Machine Vision & Digital Image Processing Fundamentals - Louis J. Galbiati
Manufacturing Facilities: Location, Planning, and Design (*2nd Edition*) – Dileep R. Sule
Creating Quality: Concepts, Systems, Strategies, and Tools - William J. Kolarick

Related Links:
<http://www.coes.latech.edu/ie/> – Department website (see all the pages in here)
<http://www.latech.edu/registrar/courses/2004-2005/courses_i.pdf> – Course Descriptions
<http://research.latech.edu/directory/places/25> – Research in the Department (No research projects at this time!)

4.6 Mechanical Engineering

Core Courses:
1. Partial Differential Equations (MATH 407)
2. Advanced Strength of Materials (MEMT 577)
3. Advanced Heat Transfer-I (MEEN 542)

Faculty:
2 assistant professors, 3 associate professors, and 2 professors (among whom one does not generally offer graduate courses).

Research Concentration:
Heat transfer, fluid mechanics, material science (bioceramics, use of nanotechnology, *etc.*), finite element analysis and CAD, MEMS, nanomachining, cryogenics.

Funding Scenario:
Not a very optimistic picture at this time, but better than some Departments in the College.

Job Scenario:
Not many graduates in the last few years. Not much information about students who vested interests in their core area.

Special Notes:
- IfM has some projects related to MEMS, and that is one area Tech has a good name for.
- Not much graduate level research is going on related to CAD.

Software Requirements:
ANSYS is used for FEA, in research and courses based on the same. **Abacus** is also used. Knowledge of CAD software such as **AutoCAD** and/or **Pro-E** can help.

Textbooks:
Any textbook used for undergraduate curriculum for subjects such as *Strength of Materials*, *Heat Transfer*, *Computational Fluid Dynamics* (*Fluid Machinery/Fluid Mechanics*), *Air Conditioning and Refrigeration*, *Machine Design etc.* in which you may take graduate level subjects. Textbooks from undergraduate studies may not be used as prescribed textbooks but would be good for reference.

Related Links:
<http://www.coes.latech.edu/meen/> – Department website (see all the pages in here)
<http://www.latech.edu/registrar/courses/2004-2005/courses_m.pdf> – Course Descriptions
<http://research.latech.edu/directory/places/23> – Research in the Department (see all the pages in here)

4.7 Microsystems Engineering

Core Courses:
1. Microsystems Principles (MSE 501)
2. Microfabrication Principles (MSE 502)
3. Microfabrication Application and Design Fabrication (MSE 503)
4. Nanotechnology Principles (MSE 505)
5. Microsystems Design, Fabrication, and Testing Laboratory (MSE 510)

Course Structure:
Students are required to take one MATH course and one STAT course, and choose four electives from any engineering area of interest, in addition to the core courses listed above.

Faculty:
Quite multidisciplinary and listing of faculty members is hence not a feasible task.

Research Concentration:
No research orientation!

Funding Scenario:
Students shall be <u>recommended</u> for an out-of-state fee waiver, if the student has a V+Q of 1170 or higher on GRE <u>and</u> maintains a GPA of 3.25 or higher.

Job Scenario:
Only one batch has graduated yet. The second batch shall graduate in Summer 2005 (mid-August). The industry did not have many openings for various reasons (See general comments in the start of the chapter.) for the first batch and most students opted for IT-related jobs.

Special Notes:
- "Professional track" offering that can make possible getting the degree in one academic year.
- Specialized field, and has meager opportunities in India at the present time. The trend indicates that situations could be better in the coming few years in India too.
- Job openings in the U.S.A. are encouraging.

Software Requirements:
No specific requirement!

Textbooks:
Fundamentals of Microfabrication - Marc Madou (may not be available in India)
Nanotechnology - Gregory Timp (Editor)
Probability and Statistics for Engineering and the Sciences - Jay L. Devore

Most courses **do not have** textbooks. Most courses depend on resources pointed to by the faculty members in the class. Mathematics and Statistics courses are the choice of the academic advisor and the student, and thus no specific textbooks can be suggested.

Related Links:
<http://www.coes.latech.edu/rgs/gradschool/microsystems.html> – Program website
<http://www.latech.edu/registrar/courses/2004-2005/courses_m.pdf> – Course Descriptions

4.8 Molecular Science & Nanotechnology

Core Courses:
1. Research Methods (MSNT 502)
2. Nanotechnology Principles (MSNT 505)
                    OR
2. Cell & Molecular Biology (MSNT 506)
3. Molecular Science and Nanotechnology Seminar (MSNT 504)

Course Structure:
Students have a wide choice, based on their academic background. More information can be found on the program website. (See "Related Links" below.)

Faculty:
Quite multidisciplinary and listing of faculty members is hence not a feasible task.

Research Concentration:
Biotechnology, nanotechnology, molecular biology, cell biology, biochemistry, nanoelectronics, polymer chemistry, biophysics.

Funding Scenario:
The College has been admitting students with funding most of the time, in order to attract more students to the budding program. Situations may soon change.

Job Scenario:
Most graduating students have been choosing Ph.D. However, those who sought jobs could successfully land in jobs relating to their field of research.

Special Notes:
- Majority of the research goes on in collaboration with various Departments in the IfM.
- More research is related to the Departments of Biology, Physics, and Chemistry.
- No "related link" is given for specific research, as the research is quite diversified.

Software Requirements:
No specific requirement.

Textbooks:
Molecular Biology of the Cell (4ᵗʰ Edition) - Bruce Alberts, Alexander Johnson, Julian Lewis, Martin Raff, Keith Roberts, Peter Walter
Textbook of Polymer Science - Bill Meyer, Jr.

Not many courses have textbooks. Most courses depend on resources pointed to by the faculty members in the class. There is not even one textbook that you *must* get without fail, in fact.

Related Links:
<http://www.coes.latech.edu/grad/msnt/> – Department website (see all the pages in here)
<http://www.latech.edu/registrar/courses/2004-2005/courses_m.pdf> – Course Descriptions
<http://www.ifm.latech.edu/> – Institute for Micromanufacturing (IfM)