



Master of Science in Computer Forensics *Frequently Asked Questions (FAQ's)*

1. What exactly is “Computer Forensics”?

Answer: Computer Forensics is defined as the collection, processing and analysis of digital information that can be successfully admitted into a court of law. Computer forensics is interdisciplinary in its nature, including topics and tools from computer engineering, computer science, information technology, network engineering, telecommunications, law and ethics.

2. Where can I get employment with an MS in Computer Forensics degree?

Answer: Computer forensic examiners (CFE) work in both the public and private sectors, and the Washington, D.C. area is home to a large work force of CFEs. These CFEs work for the FBI, DEA, USSS, as well as with the vast majority of Inspectors General and local police departments. Practically all of the major accounting and consulting firms employ computer forensic examiners on staff, and there is a growing cadre of independent consultants that work in this field.

3. What do you consider to be the ideal background for someone going into the MS in Computer Forensics (CFRS) program?

Answer: There is really no such thing as an ideal background. Some students will have an engineering degree (e.g. computer engineering), while others may have a science degree (e.g. mathematics), and yet others will come in with an arts degree (e.g. accounting) or technology degree (e.g. data base management). The ideal *candidate* as opposed to someone with an ‘ideal background’ is someone with a blend of heightened inquisitiveness and strong persistence to find, and follow, a cyber clue. In essence: a cyber detective.

4. I believe I have the qualities of inquisitiveness and persistence required to do well in the CFRS program, but I am not sure I have the technical background to be admitted. In the web information it states: “Students who hold a B.S. or B.A. degree from an accredited college or university in engineering, math, science, computer science, business (with a quantitative background), economics, or other analytical disciplines, or students who have equivalent work experience indicating analytical aptitude, may apply to the M.S in

Computer Forensics.” What do you mean by equivalent work experience?

Answer: If you have worked, or are working, in an area such as network engineering where you are responsible for setting up and administering an IP network, then you have probably acquired much of the knowledge necessary to develop forensics skills. You may also have gravitated into the field of forensics, but do not have a formal academic degree in that area, but need one in order to gain advancement in your career.

5. I do not have any advanced mathematics in my undergraduate degree. Will this prevent me from being accepted into the CFRS program?

Answer: No: we are not looking for students with advanced mathematical skills; rather we are looking for students who understand how a computer works, how a network is operated, and how protocols are used to transfer information around a network.

6. I have a degree in English, but passed CCNA and CCNP certificates while working in an IT company. Will this be sufficient to get into the CFRS program?

Answer: Yes, provided the GPA you earned in your English degree was 3.000 or better.

7. I do not have an undergraduate degree in a quantitative area and I have not taken CCNA or CCNP certificates, or their equivalents, but I have been working in the area of computer forensics for several years. Would that be sufficient academic and work experience to enter the MS in Computer Forensics?

Answer: We try to look at each candidate as a whole, and so it will depend on the amount of experience you have had in computer forensics, the GPA you earned in your undergraduate degree, etc. It may well be that you will be asked to take up to 6 credits of foundation courses before being admitted into the CFRS program.

8. What is a foundation course?

Answer: There are two, 1.5 credit hour courses in Internet Protocols, TCOM 509 and TCOM 529, and there is a 3 credit lecture/lab course on IP routing, TCOM 515. If you have had no experience in networks at all, you may also be asked to take a course in LAN and WAN (local area networks and wide area networks). These are a pair of 1.5 credit courses, TCOM 501 and TCOM 502. TCOM 501/502 are the prerequisites for TCOM 509/529.

9. Do the credits from the foundation courses count towards my CFRS degree?

Answer: No, the credits from foundation courses do not count towards your CFRS degree.

10. My undergraduate GPA was only 2.8. Will that prevent me from entering the CFRS program?

Answer: No, it should not. However, you will have to have some work experience, or professional certificates, to compensate for only having a GPA of 2.8, and you will only be able to enter in non-degree status at first.

11. What is the minimum GPA you will accept?

Answer: The minimum GPA is 2.7 for non-degree admission. The further below 3.000 the GPA is, the more relevant, and long, the work experience will have to be in order for you to be admitted in non-degree status.

12. What's the difference between registering as a non-degree student and registering as a degree-seeking student?

Answer: A non-degree student need only submit a copy of their transcript(s) rather than have an official transcript sent to Graduate Admissions under seal. Registering as a non-degree student is also faster as the results of the admissions process are known much more quickly. And also, a non-degree student cannot graduate while in that status.

13. If I register as a non-degree student, does that mean I will not be able to earn a master's degree?

Answer: No, a non-degree student may apply to enter in regular status at any time. However, a full application will have to be submitted as though you were entering George Mason University as a new student. That is, we will need a formal undergraduate transcript, three letters of recommendation, etc., as set out in the Graduate Admissions web site <http://volgenau.ite.gmu.edu/admissions/graduate.php>

14. When should I apply to enter in regular degree status so that I can move from non-degree status?

Answer: Students may have up to 12 credits of courses transferred from non-degree status to regular degree status. Students should therefore complete their application for regular masters' degree status AND HAVE BEEN ADMITTED to the MS in Computer Forensics degree program BEFORE they begin any course that will earn them more than a total of 12 credits in their MS in Telecommunications program. Students may NOT transfer more than 12 credit hours from non-degree to regular degree status.

15. So, when is the best time to transfer from non-degree to regular degree status?

Answer: Probably the best time to apply for transfer from non-degree to regular status is in the semester you are taking courses that will bring your total number of credits to 9 or 12 in the MS in Computer Forensics program. For example, if you started the first semester taking CFRS 500 and CFRS 660 and were successful in both courses, you now have 6 credits in the program. In the next semester, whether you sign up for one 3-credit class or two 3-credit classes (bringing your overall total in the program to 9 or 12 credits, respectively), you should submit your application to enter the program as a regular master's student by the due date in that semester.

HINT: Application for regular status requires three letters of recommendation. If you do not already have these, you should request such letters of recommendation from the instructors who taught you while you are a non-degree student.

16. Is that all I need to do? When I have been accepted in regular degree status, all of my applicable courses taken in non-degree status (and passed with a B grade, or above) move into my regular degree program?

Answer: No – to do that you will need to complete a “Transfer of Credit” form to move the credits you took in non-degree status into your regular degree status program. And please remember: (a) only courses passed with a grade of B, or higher will transfer; and (b) no more than 12 credits can be transferred into your regular degree program.

17. And when do I need to complete and submit the Transfer of Credit form?

Answer: There is no urgency. You just need to have completed the transfer of credits a month or so before you apply to graduate – or you will not graduate. The registrar’s office will see you as two different students: one with credits in non-degree status and one with credits in regular degree status. While the total may add up to 30 credits, each separate block of credits will not be sufficient to graduate. That is why you need to move the non-degree credits into your regular degree location so that you can satisfy your graduation requirements.

18. If I apply in time to be admitted as a regular degree-seeking student, but my academic and work experience credentials are not considered to be sufficient for admission, does that mean I will automatically be rejected?

Answer: Not necessarily; you may be admitted in provisional status, which is one of the three ways students may be admitted into a master’s program (the others being non-degree and regular status).

19. What is provisional status?

Answer: Provisional status means that you are considered to have the potential to complete the degree successfully, but lack some incoming credentials to handle some of the courses. For example, you may not have had any background in IP or IP routing, both of which are key elements you need to understand to do well in the CFRS program. You will then be required to take the necessary foundation courses to put you in a position to succeed in the program. When admitted into provisional status, a student will be sent an admissions contract to sign that states the required foundation courses that need to be taken. Foundation courses do NOT count towards the 30 credits needed to graduate.

20. So how do I move to regular status if I have been admitted into provisional status? Do I have to go through the formal application process all over again?

Answer: No, you do not have to apply again. Once you have completed the requirements set out in your contract that you signed on being admitted in provisional status, you complete a simple one-page form requesting to be moved from provisional to regular status. You attach your unofficial transcript to this form that will include your performance on the foundation courses.

21. I started an MS program in a computer engineering/forensics area at another university. Can I transfer those courses into the MS in Computer Forensics program at George Mason University?

Answer: If the courses are applicable to the CFRS program at George Mason University and you passed them with a grade of B, or higher, then the courses could be considered for transfer. The normal policy for transferring courses is to permit 6 credits from any university that is not a Virginia State University and up to 12 credits from a Virginia State University.

22. I started in the MS in TCOM program at George Mason University, and chose to do the TFAS certificate (Telecommunications Forensics and Security). Can I transfer into the CFRS degree program?

Answer: Your application to transfer into the CFRS program would be looked at in the same way as a regular application to the CFRS program. If you have the background to succeed in the CFRS program, then you would be permitted to transfer. However, you would not be permitted to transfer courses that are not considered to be part of the CFRS degree (e.g. TCOM 500, TCOM 509/529, TCOM 515) although good grades in what are foundation courses in the CFRS program (TCOM 509/529 and TCOM 515) would be a strong indicator of likely success in the CFRS program.

23. I have taken TCOM 660, TCOM 661, TCOM 662, TCOM 663, and TCOM 664 in the TCOM program as part of my TCOM degree and TFAS certificate. Can I transfer all of these courses (15 credits) into my CFRS degree?

Answer: Normally, only 12 credits are transferable between different degrees and between different levels in a degree (i.e. from non-degree to regular degree status). However, it is very likely that students would be permitted – for a limited time – to transfer more than 12 credits from the TCOM degree into the CFRS degree. The time period would probably be up to the start of the fall 2009 semester.

24. Can I pass a core course in the CFRS degree with a C grade?

Answer: There is no specific requirement to pass any particular course (core or elective) in the CFRS program with a specific grade. However, in order to graduate with your MS in CFRS, you will have to have an overall GPA of at least 3.000.

25. What if I get two C grades; will I be dismissed?

Answer: No, but you will be on academic warning. Any student in a master's program at George Mason University is dismissed if they receive two F grades, or three unsatisfactory grades (i.e. two C grades and one F grade; or three C grades)

26. If my GPA is not sufficient to make entry into a Ph.D. program (normally a minimum of a 3.5 GPA is required), what options do I have?

Answer: At present, the graduating GPA is made up of the 30 credits you submit for graduation. You may retake a course for a higher grade, so that your graduating GPA improves, but you cannot remove the lower grade from your transcript.

27. Do I have to take the core courses before I take the elective courses?

Answer: No, you just need to make sure you have the prerequisite(s) for any course you are going to take. In fact, you will not be able to take all 18 credits in the core to start with as CFRS 790 requires all students who register for that course to have earned 18 credits before registering for CFRS 790. Normally students will take CFRS 500 in their first semester as it is the prerequisite for many courses, but the order of the other courses is left up to the student.

28. If the order of taking most of the courses does not matter, how do I develop a cohesive plan of study?

Answer: It is essential that all students have a signed plan of study completed before the end of their first semester. Students may change this plan of study, but that change also needs to be approved by the student's advisor.

29. Who is my advisor?

Answer: You will be given the name of your advisor when you are admitted. If the advisor is changed, you will be notified. If you have not been notified when you are admitted. Please call the CFRS office (703) 993-3810.

30. I am a student currently on an F-1 visa at another university. Can I transfer into the MS in Computer Forensics program?

Answer: Yes. However, each student's situation tends to be different so all such inquiries should first be made to the International Student Service in the Office of International Programs & Services (OIPS) here at George Mason University ((703) 993-3964). Once the general transfer situation of the student has been clarified, they should then make application to transfer credits in the normal way (see above).

31. I am interested in taking additional qualifications once I have my MS in Computer Forensics. Can I go on to take a higher degree (e.g. a Ph.D.) or move onto a management degree (e.g. an MBA)?

Answer: Yes: students who graduate with an MS in Computer Forensics degree are eligible to apply for other higher degrees. Their ability to enter such programs will depend, as in other Master's or Ph.D. programs, on a number of factors, such as the Grade Point Average earned within their MS in Computer Forensics degree program and the

alignment of the MS in Computer Forensics courses with the courses proposed to be taken within the higher degree. A GPA of 3.5 in the MS in Computer Forensics program should enable a student to move on to a Ph.D. in Information Technology at George Mason University or to the MBA program, here or at another university. Any student who believes they will want to apply for another degree program on completion of their CFRS degree should discuss their options as soon as possible with their advisor so that they can plan an appropriate plan of study to meet their academic goals.

32. I am an undergraduate student at George Mason University in my senior year. Can I take a course within the MS in Telecommunications as an elective for my undergraduate degree?

Answer: Yes. However, undergraduates are only permitted to take courses at the 500 level, and there is only one in the Computer Forensics program, CFRS 500. If your GPA is above 3.0, you may take CFRS 500 as an elective for your undergraduate degree. Undergraduate students are reminded that they *must* get their undergraduate program advisor's approval in order to use CFRS courses as electives in their BS program.

33. If I have taken a CFRS course as an elective for my undergraduate degree and I apply, and am accepted, into the MS in Computer Forensics Program, can I "double count" the TCOM course(s) I took as an undergraduate towards my MS in Computer Forensics degree?

Answer: No, not if the Computer Forensics course you took as an undergraduate was included in your undergraduate degree plan of study. However, you will NOT be expected to repeat courses you have already taken. For example, if you took CFRS 500 as an undergraduate you will be permitted to take an elective course in its place so that your final credit count is 30.

34. Some master's degrees at George Mason University have an accelerated master's track that permits undergraduates to take graduate courses as undergraduates and then 'double-count' up to 6 credits towards their Computer Forensics degree. Is this an option in the MS in Computer Forensics?

Answer: Not yet. It is planned to have such an option where students may double count CFRS 500 in their undergraduate and graduate degrees.

35. I want to take LAW 181. How do I register for this course?

Answer: Registration for LAW 181 cannot be accomplished at the Fairfax Campus Registrar's Office or through the 4GMU phone registration system. If you plan to enroll in Law 181, you need to request a registration form from the Law Records Office, George Mason University School of Law, 3401 N. Fairfax Drive, Arlington, VA 22201. The completed registration form should then be mailed to the same address or sent by FAX to (703) 993-8019.

NOTES: (1) The Law School academic semesters may NOT be the same as those on the main Fairfax campus. Quite often, the Law School starts a week early. (2) MS in Telecommunications graduate students pay the same tuition rate they would pay for graduate school courses, and it may well be that the Law school will extend this courtesy to CFRS students. If that is the case, you should not be charged the law tuition rate.

Check with the Cashier, Student Accounts or 4GMU to determine the per credit charge and tuition due date. (3) When you request the registration forms, you should also be sent a list of instructions (e.g. where to find the reading assignments postings, parking decals, bookstore information, etc.) If you do not receive this set of instructions, please request it.

36. I am working full-time and so cannot take time off during the day. Do you offer evening courses evening?

Answer: All CFRS courses are either from 4:30 p.m. - 7:10 p.m. or 7:20 p.m. - 10:00 p.m. in the evening, Mondays through Thursdays

37. I appreciate that I can take the courses in the evenings, but I'm working full-time and am concerned that I may take forever to finish this program. Realistically, how long will this master's degree take?

Answer: Most students find that they can handle 6 credit hours a semester (i.e. coming to class twice a week) without it having a serious impact on their professional careers. Taking six credit hours every fall and spring semester, but none in the summer session, means that it will be about 30 months from start to finish for the degree. Taking courses in the summer session speeds up the degree completion, but it is not recommended that students take more than one summer course per year. If you are only able to take one course a semester, and none in the summer, you will still finish in 5 years.

38. Where are the courses going to be offered?

Answer: Our current plans are to try and hold all of the CFRS courses on both the Prince William campus and the Fairfax campus over the initial period. When we see the extent of the students' preferences for campus location, we may vary the ratio of courses offered on the two campuses to reflect the students' preferences.

39. What is the length of time permitted to finish my master's degree?

Answer: The normal rule is that a master's degree has to be completed in 6 years. However, under certain circumstances (serving abroad, major illness, etc.) permission may be sought to extend the maximum period to 10 years.

40. I have put off going to graduate school because I am likely to be moved to different locations by my employer every 18 months. Do you offer courses on-line so I can take them anywhere I am posted?

Answer: The MS in Computer Forensics degree is not at present offered on line, and there are no immediate plans to do this. However, it is very likely that at least some of the courses may be offered on-line within five years.